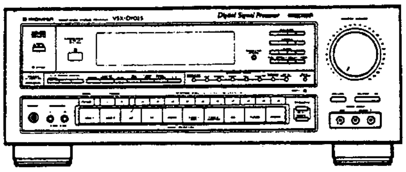
PIONEER

The Art of Entertainment

Service Manual



ORDER NO.
ARP2703

AUDIO/VIDEO STEREO RECEIVER

VSX-D702S

VSX-D602S

VSX−D702S AND VSX−D602S HAVE THE FOLLOWING :

Type	Model		Power Requirement	Remarks
	VSX−D702S	VSX−D602S		
KU	○	○	AC120V only	
KC	○	○	AC120V only	
SD	○	—	AC110V, 120V−127V, 220V, 240V (Switchable)	

- **This manual is applicable to the following : VSX−D702S/KU, KC and SD ; VSX−D602S/KU and KC.**
- **For the following : VSX−D702S/KC and SD ; VSX−D602S/KU and KC, refer to page 90.**

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1. SAFETY INFORMATION

This service manual is intended for qualified service technicians; it is not meant for the casual do-it-yourselfer. Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual.
Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty. If you are not qualified to perform the repair of this product properly and safely, you should not risk trying to do so and refer the repair to a qualified service technician.

WARNING

Lead in solder used in this product is listed by the California Health and Welfare agency as a known reproductive toxicant which may cause birth defects or other reproductive harm (California Health & Safety Code, Section 25249.5).
When servicing or handling circuit boards and other components which contain lead in solder, avoid unprotected skin contact with the solder. Also, when soldering do not inhale any smoke or fumes produced.

NOTICE
(FOR CANADIAN MODEL ONLY)
Fuse symbols (fast operating fuse) and/or (slow operating fuse) on PCB indicate that replacement parts must be of identical designation.

REMARQUE
(POUR MODÈLE CANADIEN SEULEMENT)
Les symboles de fusible (fusible de type rapide) et/ou (fusible de type lent) sur CCI indiquent que les pièces de remplacement doivent avoir la même désignation.

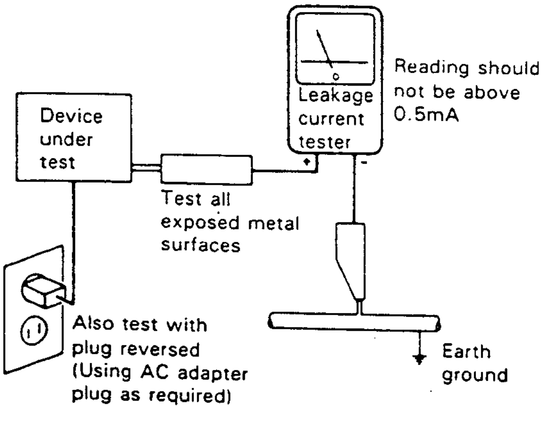
(FOR USA MODEL ONLY)

1. SAFETY PRECAUTIONS

The following check should be performed for the continued protection of the customer and service technician.

LEAKAGE CURRENT CHECK

Measure leakage current to a known earth ground (water pipe, conduit, etc.) by connecting a leakage current tester such as Simpson Model 229-2 or equivalent between the earth ground and all exposed metal parts of the appliance (input/output terminals, screwheads, metal overlays, control shaft, etc.). Plug the AC line cord of the appliance directly into a 120V AC 60Hz outlet and turn the AC power switch on. Any current measured must not exceed 0.5mA.


Reading should not be above 0.5mA
Leakage current tester
Device under test
Test all exposed metal surfaces
Also test with plug reversed (Using AC adapter plug as required)
Earth ground

AC Leakage Test

ANY MEASUREMENTS NOT WITHIN THE LIMITS OUTLINED ABOVE ARE INDICATIVE OF A POTENTIAL SHOCK HAZARD AND MUST BE CORRECTED BEFORE RETURNING THE APPLIANCE TO THE CUSTOMER.

2. PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in the appliance have special safety related characteristics. These are often not evident from visual inspection nor the protection afforded by them necessarily can be obtained by using replacement components rated for voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in this Service Manual.

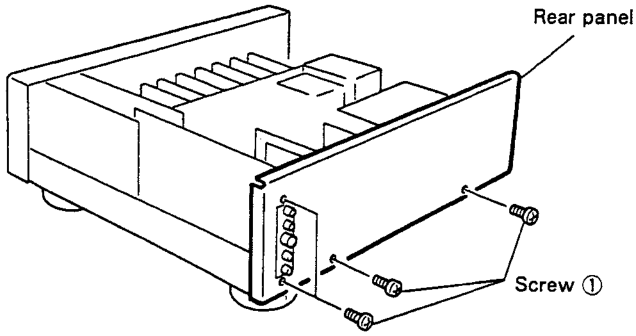
Electrical components having such features are identified by marking with a ⚠ on the schematics and on the parts list in this Service Manual.
The use of a substitute replacement component which dose not have the same safety characteristics as the PIONEER recommended replacement one, shown in the parts list in this Service Manual, may create shock, fire, or other hazards.

Product Safety is continuously under review and new instructions are issued from time to time. For the latest information, always consult the current PIONEER Service Manual. A subscription to, or additional copies of, PIONEER Service Manual may be obtained at a nominal charge from PIONEER.

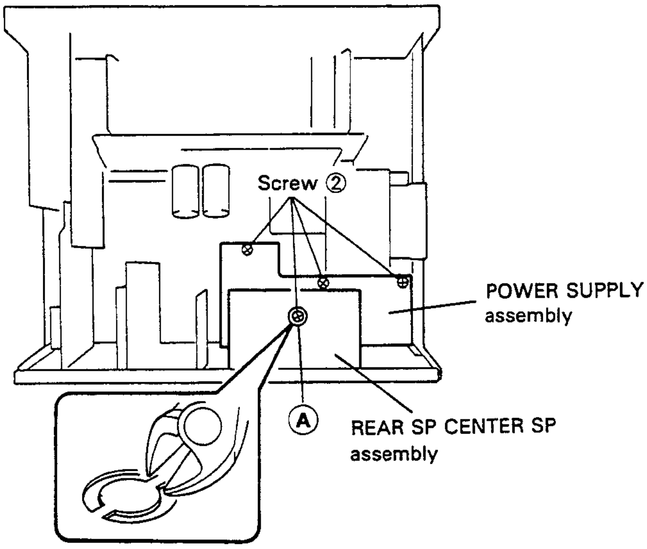
2. DISASSEMBLY

2.1 POWER SUPPLY ASSEMBLY

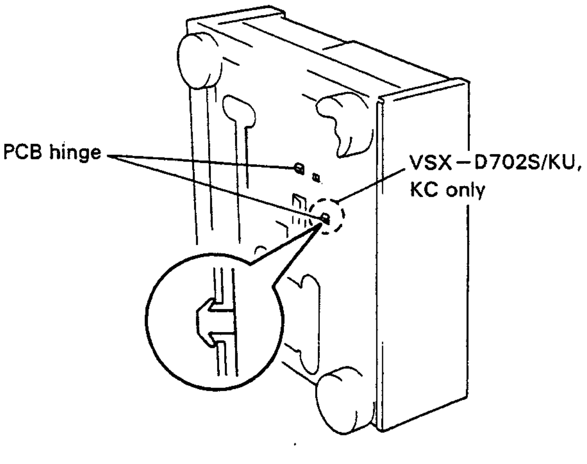
1. Remove the bonnet case (7 screws).
2. Remove the screws on the rear panel. (four screws ①).


Rear panel
Screw ①

3. Use nippers to cut at Ⓐ in the REAR SP CENTER SP assembly.
4. Remove the screws on the POWER SUPPLY assembly. (four screws ②)

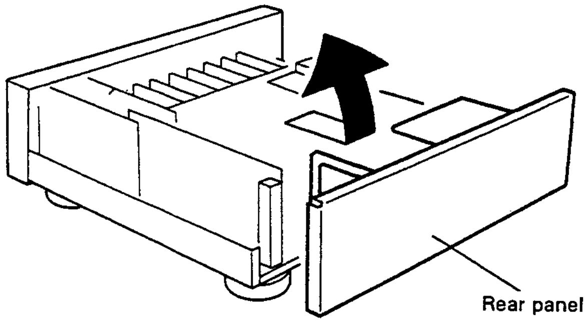

Screw ②
POWER SUPPLY assembly
Ⓐ
REAR SP CENTER SP assembly

5. Stand the unit upright, and use fine-nosed pliers to press in the PCB hinge on the bottom plate.


PCB hinge
VSX−D702S/KU, KC only

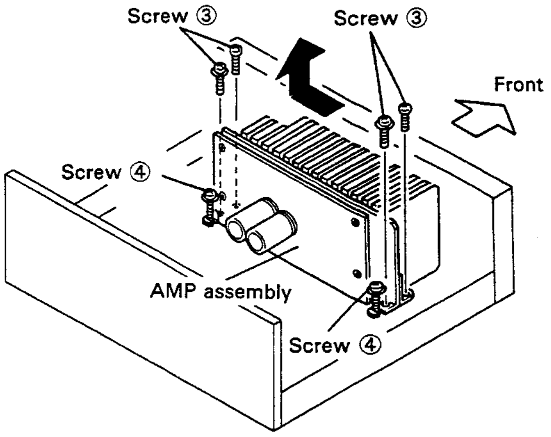
> ***Note :***
> ***Avoid shorting the unit by using an insulation sheet or similar between transformer TP and other assemblies when positioning the unit securely.***

6. Return the unit to its original position. Pull the rear panel toward the operator and securely place it so that the side with the POWER SUPPLY assembly buttons are visible.

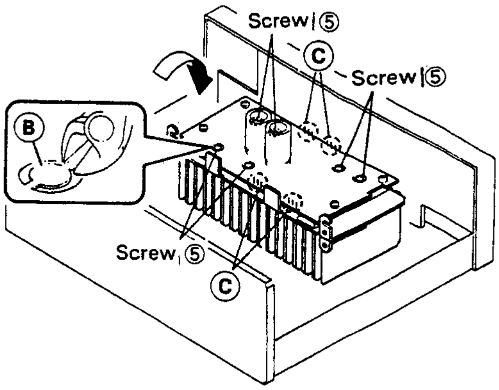


2.2 AMP ASSEMBLY

1. Remove the four heat sink locking screws ③ and loosen the two regular screws④.
2. Cut the binder with nippers.


Screw ③
Screw ③
Front
Screw ④
AMP assembly
Screw ④

3. Cut the AMP assembly at Ⓑ with nippers and then remove the six screws ⑤.
4. Remove the transistor solder at Ⓒ (four locations).


Screw ⑤
Ⓒ
Screw ⑤
Ⓑ
Screw ⑤
Ⓒ

3. EXPLODED VIEWS, PACKING AND PARTS LIST

NOTES :

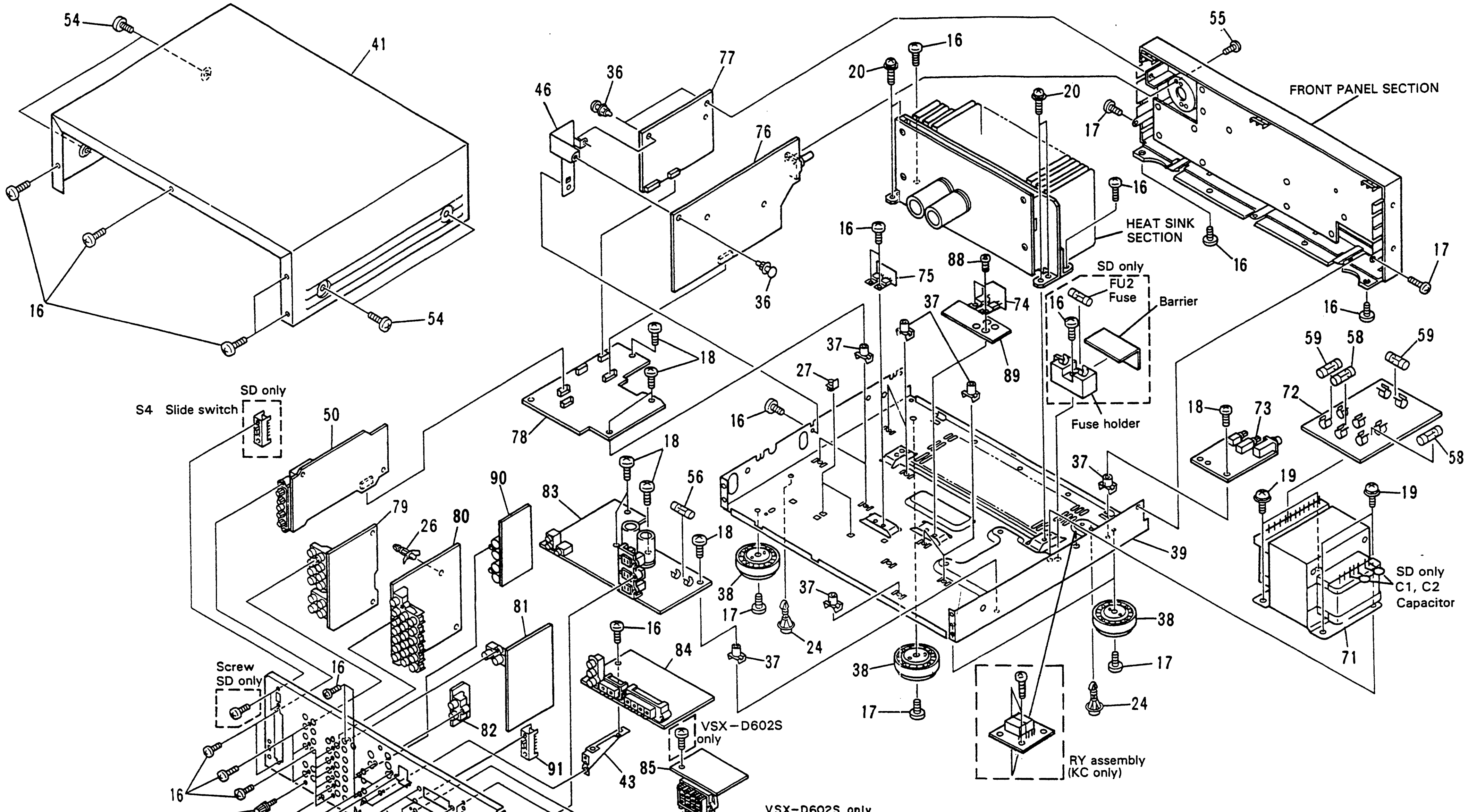
- *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*

Parts list of Exterior and Packing

Mark	No.	Description	Parts No.
	1	MASTER VOL ASSEMBLY	AAB1119
	2	KIN BUTTON	AAD1609
	3	M & S KNOB	AAD1997
	4	SP BUTTON (PLS)	AAD2211
	5	MUTE BUTTON (PLS)	AAD2264
	6	ACOUSTIC BUTTON (PLS)	AAD2265
	7	FUNCTION BUTTON L	AAD2266
	8	FUNCTION BUTTON R	AAD2267
	9	TX FUNCTION BUTTON	AAD2270
	10	BUTTON (PLS)	AAD2271
	11	POWER BUTTON (PLS)	AAD2272
	12	KIN BUTTON	AAD2273
	13	DISPLAY PANEL	AAK2296
	14	SASH (PLS)	AAK2298
NSP	15	BADGE	AAM1058
	16	SCREW	ABA−298
	17	SCREW (STEEL)	ABA1009
	18	SCREW	ABA1018
	19	SCREW (STEEL)	ABA1053
	20	SCREW	ABA1054
	21	SCREW	ABA1082
⚠	22	AC POWER CORD	ADG1058
	23	FM ANTENNA	ADH1004
NSP	24	PCB HOLDER	AEC1097
	25	MICA SHEET	AEC1140
NSP	26	PCB SUPPORT	AEC1215
NSP	27	PCB HINGE	AEC1407
	28	MICA SHEET	AEE1014
	29	STRAIN RELIEF	AEP−113
NSP	30	ALKALINE (LR6, AA)	AEX1007
	31	FRONT REAR PAD	AHA1503
	32	PACKING CASE	AHD2516
	33	PACKING SHEET	AHG1021
NSP	34	TERMINAL SCREW	AKE−031
	35	FRONT PANEL	AMB2131
	36	RIVET (PLASTIC)	AMR1066
NSP	37	PCB MOULD	AMR1525
	38	FOOT ASSEMBLY	AMR2414
NSP	39	CHASSIS	ANA1178
NSP	40	REAR PANEL	ANC2069
	41	METAL BONNET (MTL)	ANE1373
	42	....	
NSP	43	PCB HOLDER A	ANG−516
NSP	44	SUB TRANS HOLDER	ANG1393
NSP	45	POWER ASSEMBLY HOLDER −F	ANG1575
NSP	46	PCB HOLDER	ANG1670
NSP	47	POWER ASSEMBLY HOLDER −R	ANG1683

Mark	No.	Description	Parts No.
NSP	48	HEAT SINK	ANH1379
	49	OPE. INSTRUCTIONS (ENGLISH)	ARB1421
◉	50	TUNER ASSEMBLY	AWE1140
	51	FL. U−COM ASSEMBLY	AWK1721
	52	REMOTE CONTROL UNIT (CU−VSX048)	AXD1268
	53	SCREW	BPZ26P080FMC
	54	SCREW	FBT40P060FZK
	55	SCREW	VMZ30P060FCU
⚠	56	FUSE (8A, FU1)	AEK1002
	57	....	
⚠	58	FUSE (4A, FU3, 4)	AEK−125
⚠	59	FUSE (1.25A, FU5, 6)	AEK−120
	60	LOOP ANTENNA (L)	ATB1005
⚠	61	TRANSISTOR (Q1)	2SC3281
⚠	62	POWER TRANSISTOR (Q10)	2SA1803
⚠	63	TRANSISTOR (Q2)	2SC3281
⚠	64	TRANSISTOR (Q3)	2SA1302
⚠	65	TRANSISTOR (Q4)	2SA1302
⚠	66	TRANSISTOR (Q5)	2SC3182N
⚠	67	TRANSISTOR (Q6)	2SA1265N
⚠	68	POWER TRANSISTOR (Q7)	2SC4688
⚠	69	POWER TRANSISTOR (Q8)	2SC4688
⚠	70	POWER TRANSISTOR (Q9)	2SA1803
⚠	71	POWER TRANSFORMER (T1)	ATS1495
NSP	72	TRANS TERMINAL ASSEMBLY	AWZ4268
	73	SP SW ASSEMBLY	AWZ4289
	74	REG (5.6V) ASSEMBLY	AWZ4267
	75	REG (12V) ASSEMBLY	AWZ4266
	76	VOLUME ASSEMBLY	AWZ4292
◉	77	DSP ASSEMBLY	AWZ4294
	78	CONNECTION ASSEMBLY	AWZ4291
	79	AUDIO FUNCTION ASSEMBLY	AWZ4263
	80	A/V FUNCTION ASSEMBLY	AWZ4980
◉	81	OSD ASSEMBLY	AWZ4295
	82	PRE OUT ASSEMBLY	AWZ4272
	83	POWER SUPPLY ASSEMBLY	AWZ4287
	84	REAR SP CENTER SP ASSEMBLY	AWZ4981
NSP	85	FRONT SP ASSEMBLY	AWZ4978
	86	AMP ASSEMBLY	AWZ4286
NSP	87	PCB HOLDER	ANG1726
	88	SCREW	ABA1007
NSP	89	HEAT SINK	ANH1436
	90	S TERM ASSEMBLY	AWQ1017
	91	CENTER SP SWITCH (S3)	AKX1004

● EXTERIOR


54
41
16
54
46
36
77
76
36
20
16
20
17
55
FRONT PANEL SECTION
16
HEAT SINK SECTION
16
17
16
88
75
37
74
89
SD only
FU2
Fuse
Barrier
16
Fuse holder
18
78
SD only
S4 Slide switch
50
37
27
16
59
58
59
72
73
18
58
90
83
56
18
79
26
80
18
37
19
19
39
38
17
24
37
38
17
24
38
17
SD only
C1, C2
Capacitor
71
81
16
84
37
Screw
SD only
16
82
91
43
VSX-D602S only
85
VSX-D602S only
PCB Holder
RY assembly
(KC only)
16
34
16

VSX-D602S only

SD only

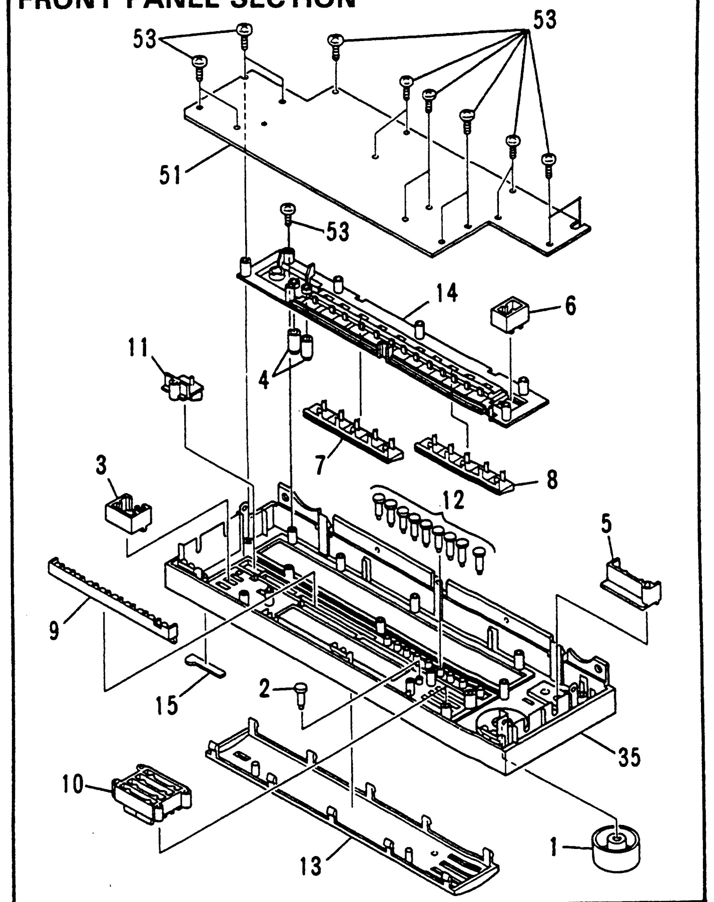
S1 Voltage selector

SD only

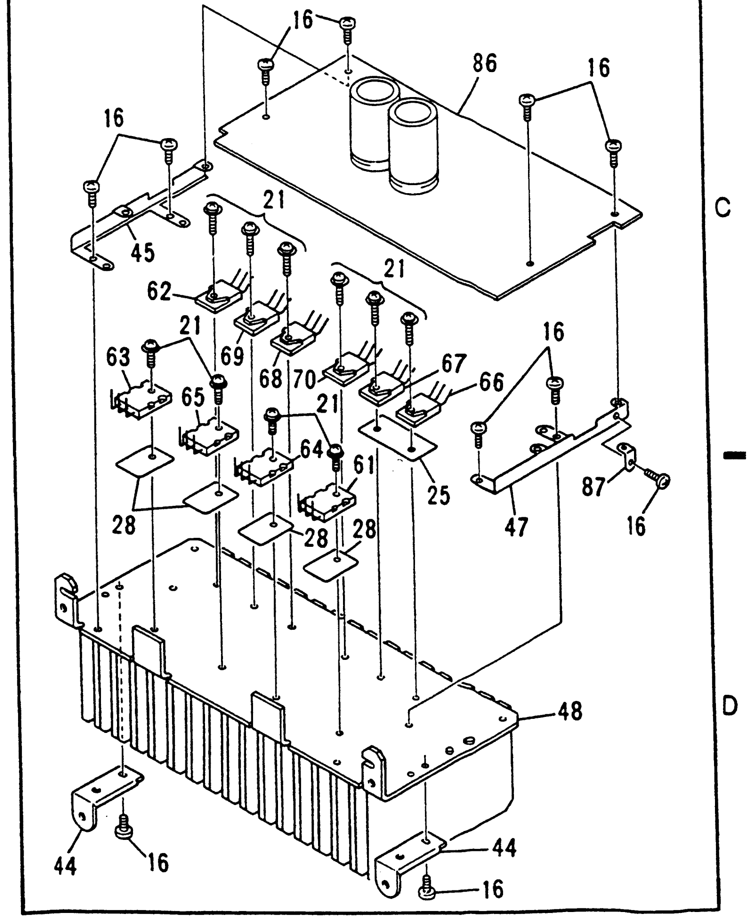
S2 Voltage selector

22
29
40

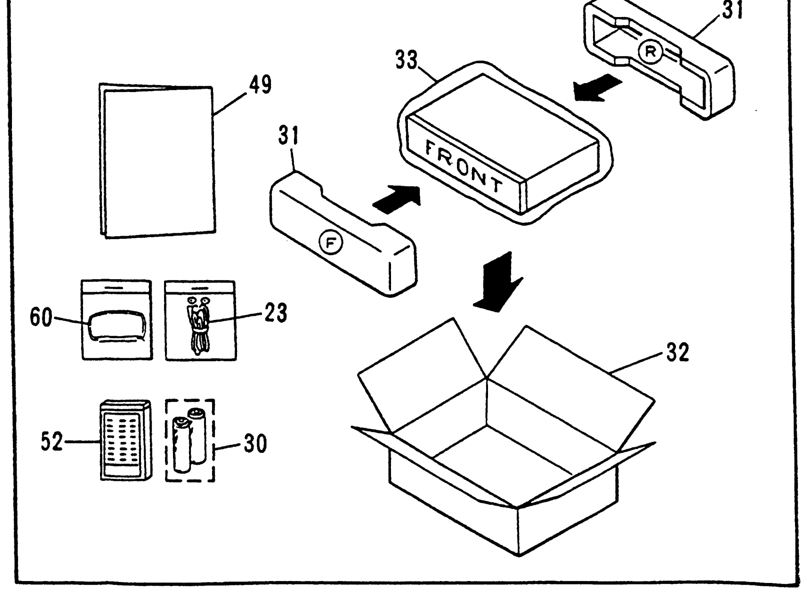
FRONT PANEL SECTION


53
53
51
53
14
6
11
4
7
8
3
12
5
9
15
2
35
10
13
1

HEAT SINK SECTION

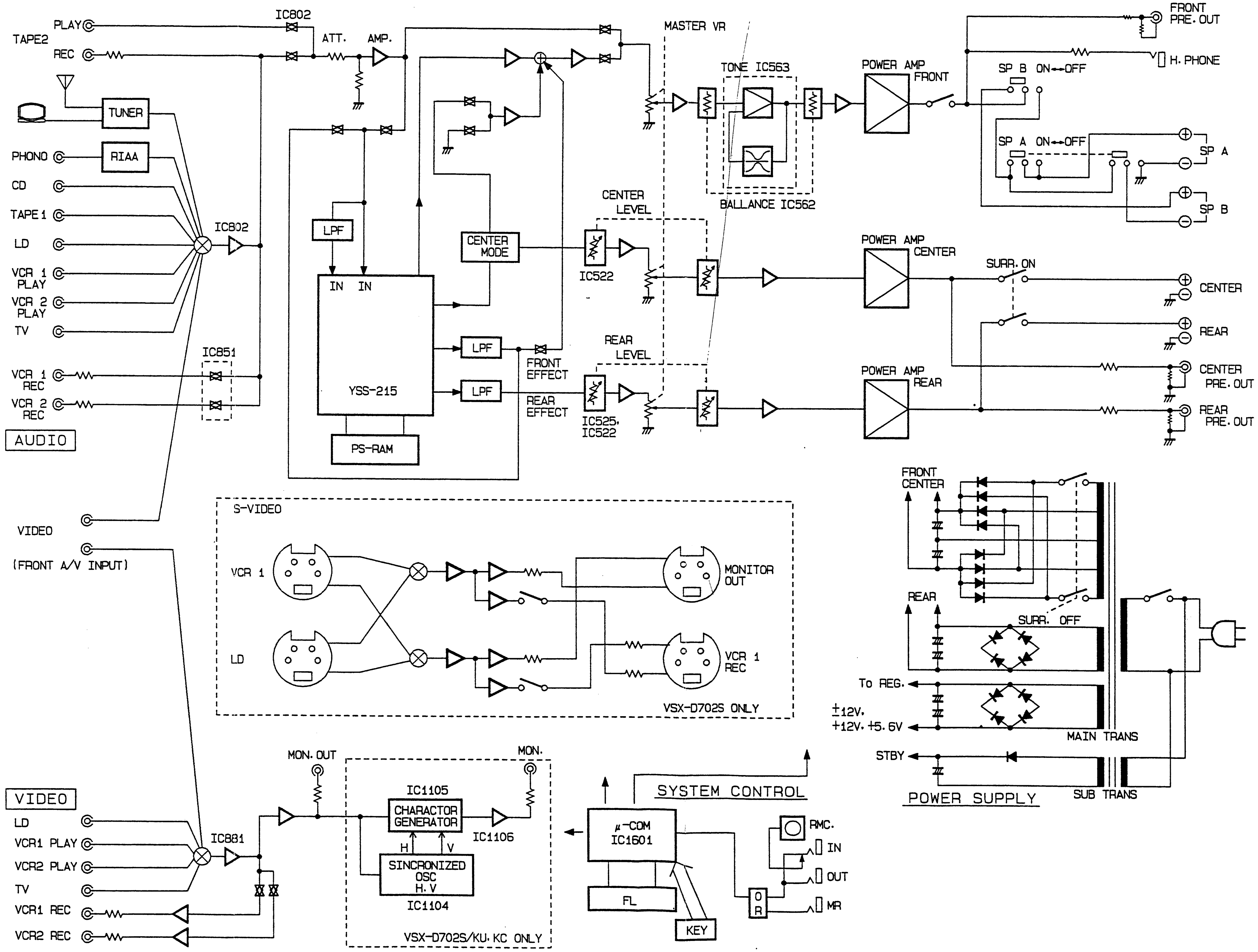

16
86
16
16
45
21
21
62
69
68
70
67
66
16
63
21
65
64
21
61
25
87
47
16
28
28
28
48
44
16
44
16

● PACKING


49
33
31
FRONT
31
60
23
32
52
30

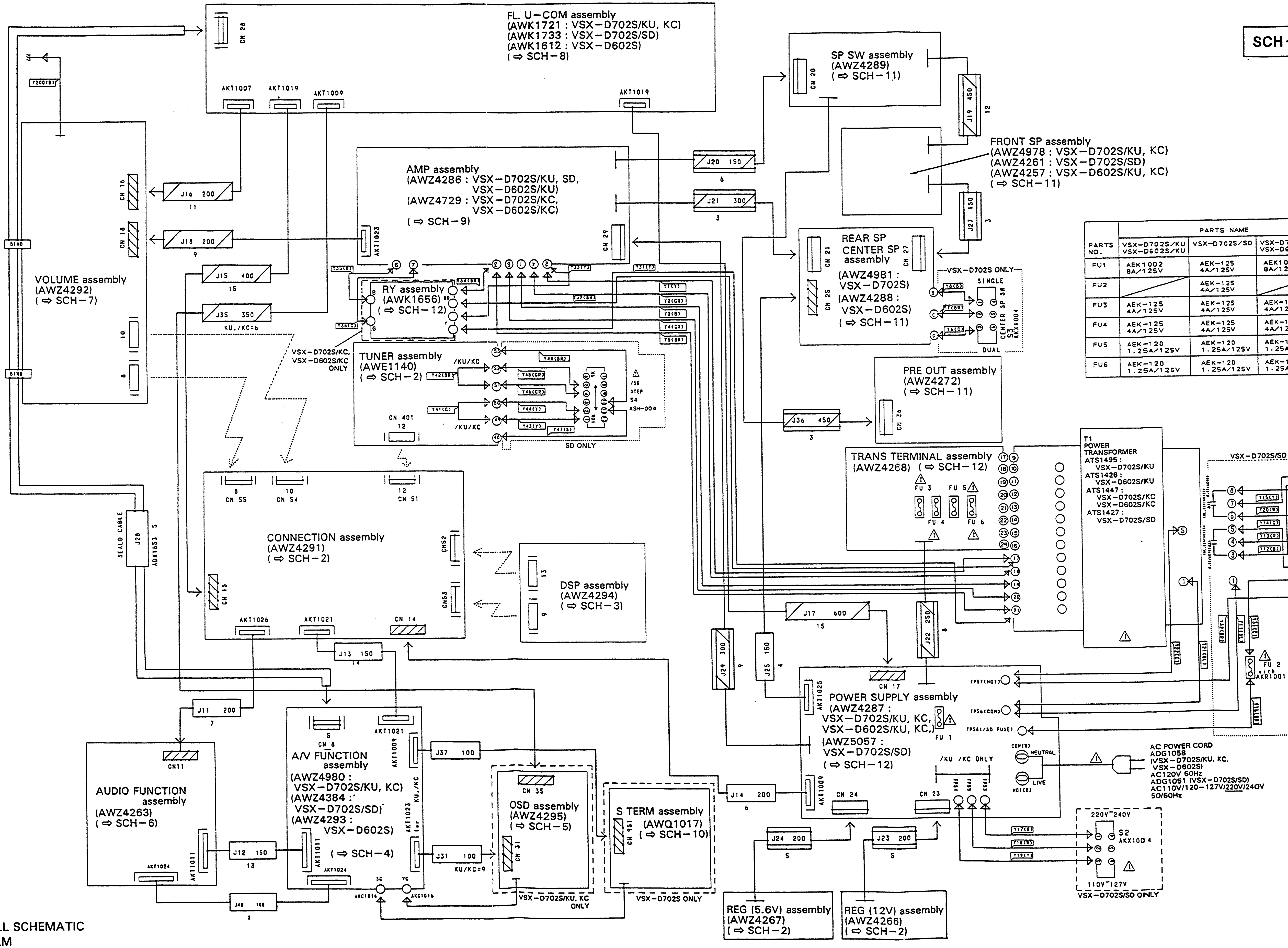
NOTE : Screws adjacent to ▼ mark on the product are used for disassembly.

4. BLOCK DIAGRAM


TAPE2
PLAY
REC
IC802
ATT.
AMP.
MASTER VR
TONE IC563
BALLANCE IC562
POWER AMP
FRONT
FRONT PRE. OUT
H. PHONE
SP B ON↔OFF
SP A ON↔OFF
SP A
SP B
TUNER
PHONO
RIAA
CD
TAPE 1
LD
VCR 1 PLAY
VCR 2 PLAY
TV
IC802
LPF
IN
IN
YSS-215
PS-RAM
CENTER MODE
CENTER LEVEL
IC522
POWER AMP
CENTER
SURR. ON
CENTER
REAR
LPF
FRONT EFFECT
LPF
REAR EFFECT
REAR LEVEL
IC525, IC522
POWER AMP
REAR
CENTER PRE. OUT
REAR PRE. OUT
IC851
VCR 1 REC
VCR 2 REC
AUDIO
VIDEO
(FRONT A/V INPUT)
S-VIDEO
VCR 1
LD
MONITOR OUT
VCR 1 REC
VSX-D702S ONLY
FRONT
CENTER
REAR
SURR. OFF
To REG.
±12V,
+12V, +5.6V
STBY
MAIN TRANS
SUB TRANS
POWER SUPPLY
VIDEO
LD
VCR1 PLAY
VCR2 PLAY
TV
VCR1 REC
VCR2 REC
IC881
MON. OUT
IC1105
CHARACTOR GENERATOR
H
V
SINCRONIZED OSC H. V
IC1104
IC1106
MON.
VSX-D702S/KU, KC ONLY
SYSTEM CONTROL
μ-COM IC1601
FL
KEY
OR
RMC.
IN
OUT
MR

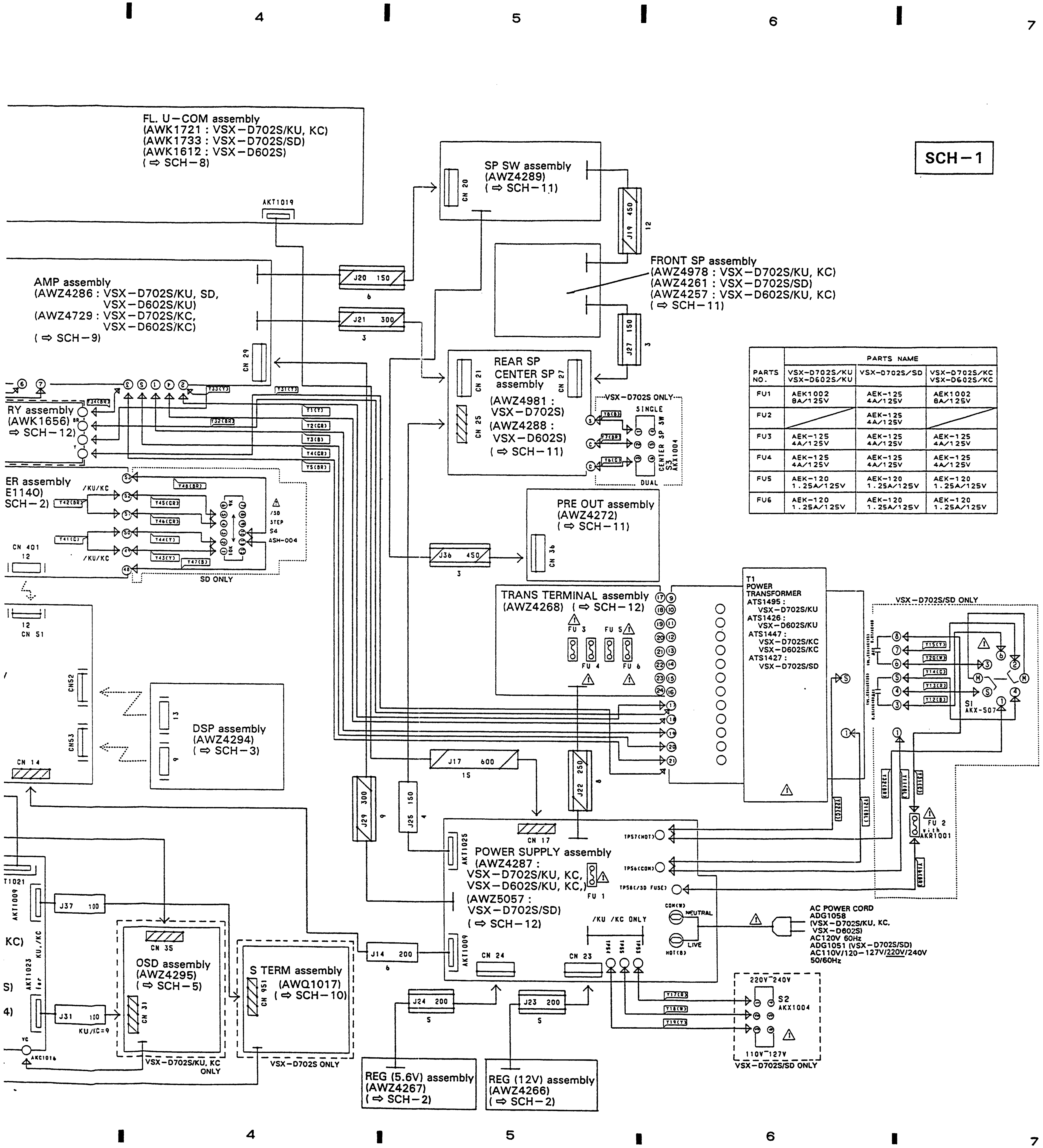
5. SCHEMATIC AND PCB CONNECTION DIAGRAMS

5.1 OVERALL SCHEMATIC DIAGRAM


1
2
3
4
5
6
A
B
C
D
FL. U-COM assembly
(AWK1721 : VSX-D702S/KU, KC)
(AWK1733 : VSX-D702S/SD)
(AWK1612 : VSX-D602S)
(⇒ SCH-8)
AKT1007
AKT1019
AKT1009
AKT1019
CN 28
SP SW assembly
(AWZ4289)
(⇒ SCH-11)
CN 20
J19 450
12
FRONT SP assembly
(AWZ4978 : VSX-D702S/KU, KC)
(AWZ4261 : VSX-D702S/SD)
(AWZ4257 : VSX-D602S/KU, KC)
(⇒ SCH-11)
J27 150
3
SCH-
AMP assembly
(AWZ4286 : VSX-D702S/KU, SD,
VSX-D602S/KU)
(AWZ4729 : VSX-D702S/KC,
VSX-D602S/KC)
(⇒ SCH-9)
AKT1023
CN 29
J20 150
6
J21 300
3
REAR SP
CENTER SP
assembly
(AWZ4981 :
VSX-D702S)
(AWZ4288 :
VSX-D602S)
(⇒ SCH-11)
CN 21
CN 25
CN 27
VSX-D702S ONLY
SINGLE
DUAL
CENTER SP SW
S3
AKX1004
VOLUME assembly
(AWZ4292)
(⇒ SCH-7)
CN 16
CN 18
J16 200
11
J18 200
9
J15 400
15
J35 350
KU,/KC=6
T200(B)
BIND
BIND
RY assembly
(AWK1656)
(⇒ SCH-12)
VSX-D702S/KC,
VSX-D602S/KC
ONLY
TUNER assembly
(AWE1140)
(⇒ SCH-2)
/KU/KC
CN 401
12
/SD
STEP
S4
ASH-004
SD ONLY
PRE OUT assembly
(AWZ4272)
(⇒ SCH-11)
CN 36
J36 450
3
CONNECTION assembly
(AWZ4291)
(⇒ SCH-2)
CN 55
CN 54
CN 51
CN 15
CN52
CN53
AKT1026
AKT1021
CN 14
DSP assembly
(AWZ4294)
(⇒ SCH-3)
SEALD CABLE
J28
ADX1653
TRANS TERMINAL assembly
(AWZ4268) (⇒ SCH-12)
FU 3
FU 4
FU 5
FU 6
T1
POWER
TRANSFORMER
ATS1495 :
VSX-D702S/KU
ATS1426 :
VSX-D602S/KU
ATS1447 :
VSX-D702S/KC
VSX-D602S/KC
ATS1427 :
VSX-D702S/SD
VSX-D702S/SD
J17 600
15
J22 250
J29 300
9
J25 150
4
FU 2
AKR1001
POWER SUPPLY assembly
(AWZ4287 :
VSX-D702S/KU, KC,
VSX-D602S/KU, KC,)
(AWZ5057 :
VSX-D702S/SD)
(⇒ SCH-12)
AKT1025
CN 17
FU 1
TPS7(HOT)
TPS6(COM)
TPS8(/SD FUSE)
/KU /KC ONLY
COM(W)
NEUTRAL
LIVE
HOT(B)
AKT1009
CN 24
CN 23
AC POWER CORD
ADG1058
(VSX-D702S/KU, KC,
VSX-D602S)
AC120V 60Hz
ADG1051 (VSX-D702S/SD)
AC110V/120-127V/220V/240V
50/60Hz
220V-240V
S2
AKX1004
110V-127V
VSX-D702S/SD ONLY
J13 150
14
J11 200
7
AUDIO FUNCTION
assembly
(AWZ4263)
(⇒ SCH-6)
CN11
AKT1011
AKT1024
J12 150
13
J40 100
3
A/V FUNCTION
assembly
(AWZ4980 :
VSX-D702S/KU, KC)
(AWZ4384 :
VSX-D702S/SD)
(AWZ4293 :
VSX-D602S)
(⇒ SCH-4)
CN 8
AKT1021
AKT1009
AKT1023
AKT1011
AKT1024
KU,/KC
J37 100
J31 100
KU/KC=9
SC
VC
AKC1016
AKC1016
OSD assembly
(AWZ4295)
(⇒ SCH-5)
CN 35
CN 31
VSX-D702S/KU, KC
ONLY
S TERM assembly
(AWQ1017)
(⇒ SCH-10)
CN 951
VSX-D702S ONLY
J14 200
6
J24 200
5
J23 200
5
REG (5.6V) assembly
(AWZ4267)
(⇒ SCH-2)
REG (12V) assembly
(AWZ4266)
(⇒ SCH-2)

PARTS NO.	PARTS NAME		
	VSX-D702S/KU VSX-D602S/KU	VSX-D702S/SD	VSX-D7 VSX-D6
FU1	AEK1002 8A/125V	AEK-125 4A/125V	AEK10 8A/12
FU2		AEK-125 4A/125V	
FU3	AEK-125 4A/125V	AEK-125 4A/125V	AEK-1 4A/12
FU4	AEK-125 4A/125V	AEK-125 4A/125V	AEK-1 4A/12
FU5	AEK-120 1.25A/125V	AEK-120 1.25A/125V	AEK-1 1.25A
FU6	AEK-120 1.25A/125V	AEK-120 1.25A/125V	AEK-1 1.25A

SCH-1 OVERALL SCHEMATIC DIAGRAM


4
5
6
7
8
SCH−1
FL. U−COM assembly
(AWK1721 : VSX−D702S/KU, KC)
(AWK1733 : VSX−D702S/SD)
(AWK1612 : VSX−D602S)
(⇨ SCH−8)
AKT1019
SP SW assembly
(AWZ4289)
(⇨ SCH−11)
CN 20
J19 450
12
FRONT SP assembly
(AWZ4978 : VSX−D702S/KU, KC)
(AWZ4261 : VSX−D702S/SD)
(AWZ4257 : VSX−D602S/KU, KC)
(⇨ SCH−11)
J27 150
3
AMP assembly
(AWZ4286 : VSX−D702S/KU, SD, VSX−D602S/KU)
(AWZ4729 : VSX−D702S/KC, VSX−D602S/KC)
(⇨ SCH−9)
J20 150
6
J21 300
3
CN 29
REAR SP
CENTER SP assembly
(AWZ4981 : VSX−D702S)
(AWZ4288 : VSX−D602S)
(⇨ SCH−11)
CN 21
CN 27
CN 25
VSX−D702S ONLY
SINGLE
DUAL
S3 AKX1004
CENTER SP SW
RY assembly
(AWK1656)
⇨ SCH−12)
ER assembly
E1140)
SCH−2)
/KU/KC
CN 401
12
S4 ASH-004
/SD STEP
10k
9k
SD ONLY
PRE OUT assembly
(AWZ4272)
(⇨ SCH−11)
CN 36
J36 450
3
TRANS TERMINAL assembly
(AWZ4268) (⇨ SCH−12)
FU 3
FU 4
FU 5
FU 6
T1
POWER TRANSFORMER
ATS1495 : VSX−D702S/KU
ATS1426 : VSX−D602S/KU
ATS1447 : VSX−D702S/KC VSX−D602S/KC
ATS1427 : VSX−D702S/SD
VSX−D702S/SD ONLY
S1 AKX-507
FU 2 with AKR1001
12
CN 51
CN52
CN53
DSP assembly
(AWZ4294)
(⇨ SCH−3)
13
9
CN 14
J17 600
15
J22 250
8
J29 300
9
J25 150
4
CN 17
AKT1025
POWER SUPPLY assembly
(AWZ4287 : VSX−D702S/KU, KC, VSX−D602S/KU, KC,)
(AWZ5057 : VSX−D702S/SD)
(⇨ SCH−12)
FU 1
TPS7(HOT)
TPS6(COM)
TPS8(/SD FUSE)
/KU /KC ONLY
NEUTRAL
LIVE
AC POWER CORD
ADG1058
(VSX−D702S/KU, KC, VSX−D602S)
AC120V 60Hz
ADG1051 (VSX−D702S/SD)
AC110V/120−127V/220V/240V
50/60Hz
AKT1009
CN 24
CN 23
T1021
AKT1009
J37 100
KC)
AKT1023
KU, /KC
S)
4)
J31 100
KU/KC=9
AKC1016
CN 35
OSD assembly
(AWZ4295)
(⇨ SCH−5)
CN 31
VSX−D702S/KU, KC ONLY
S TERM assembly
(AWQ1017)
(⇨ SCH−10)
CN 951
VSX−D702S ONLY
J14 200
6
J24 200
5
J23 200
5
220V−240V
S2 AKX1004
110V−127V
VSX−D702S/SD ONLY
REG (5.6V) assembly
(AWZ4267)
(⇨ SCH−2)
REG (12V) assembly
(AWZ4266)
(⇨ SCH−2)

PARTS NO.	PARTS NAME		
	VSX−D702S/KU VSX−D602S/KU	VSX−D702S/SD	VSX−D702S/KC VSX−D602S/KC
FU1	AEK1002 8A/125V	AEK−125 4A/125V	AEK1002 8A/125V
FU2		AEK−125 4A/125V	
FU3	AEK−125 4A/125V	AEK−125 4A/125V	AEK−125 4A/125V
FU4	AEK−125 4A/125V	AEK−125 4A/125V	AEK−125 4A/125V
FU5	AEK−120 1.25A/125V	AEK−120 1.25A/125V	AEK−120 1.25A/125V
FU6	AEK−120 1.25A/125V	AEK−120 1.25A/125V	AEK−120 1.25A/125V

Note: Type 1

1. **When ordering service parts, be sure to refer to "PARTS LIST of EXPLODED VIEWS" or "PCB PARTS LIST".**
2. **Since these are basic circuits, some parts of them or the values of some components may be changed for improvement.**
3. **RESISTORS:**
   Unit: k:kΩ, M:MΩ, or Ω unless otherwise noted.
   Rated power: 1/4W, 1/6W, 1/8W, 1/10W unless otherwise noted.
   Tolerance: (F): ±1%, (G): ±2%, (K): ±10%, (M): ±20% or ±5% unless otherwise noted.
4. **CAPACITORS:**
   Unit: p:pF or μF unless otherwise noted.
   Ratings: capacitor (μF)/ voltage (V) unless otherwise noted.
   Rated voltage: 50V except for electrolytic capacitors.
5. **COILS:**
   Unit: m:mH or μH unless otherwise noted.
6. **VOLTAGE AND CURRENT:**
   V : Signal voltage at rated output.
   : DC voltage (V) at no input signal unless otherwise noted. Value in ( ) is DC voltage at rated power.
   mV : Signal voltage at FM 1kHz, 100% MOD.
   ⇦ mA or ← mA : DC current at no input signal unless otherwise noted.
7. **OTHERS:**
   - ➡ : Signal route.
   - ⊘ : Adjusting point.
   - ▼ (Red) : Measurement point.
   - The ⚠ mark found on some component parts indicates the importance of the safety factor of the parts. Therefore, when replacing, be sure to use parts of identical designation.
8. **SWITCHES** (Underline indicates switch position):

S1	VOLTAGE SELECTOR (VSX−D702S/SD ONLY) AC110V/120−127V/220V/240V
S2	VOLTAGE SELECTOR (VSX−D702S/SD ONLY) AC110−127V/220−240V
S3	CENTER SP SELECT (VSX−D702S ONLY) SINGLE/DUAL
S4	SLIDE SWITCH (9k/10k)(VSX−D702S/SD ONLY)

FL. U−COM assembly

S601	SIMULATED STEREO
S603	POWER
S604	ASC MEMORY
S605	THEATER
S606	V−SIGNAL SELECTOR
S607	BAND
S608	ASC 1
S609	PROLOGIC THEATER
S611	TUNING DOWN
S612	ASC 2
S613	EFECT DOWN
S614	VCR 1
S615	TUNING UP
S616	MEMORY
S617	BASS DOWN
S618	VCR 2
S619	1
S620	CUSTOM MEMO SEL.
S621	TREBLE DOWN
S622	LD
S623	2
S624	SCAN
S625	DOLBY PROLOGIC
S626	TV
S627	3
S628	MPX MODE
S629	BALANCE LCH
S630	VIDEO
S631	4
S632	TUNING MODE
S633	EFECT UP
S634	TAPE 1/DAT
S635	5
S636	DIRECT ACCESS
S637	BASS UP
S638	TAPE 2/MONITOR
S639	6
S640	HITS
S641	DOLBY 3CH LOGIC
S642	CD
S643	7
S644	SIMULATED SURROUND
S645	TREBLE UP
S646	TUNER
S647	8
S648	JAZZ
S649	BALANCE RCH
S650	PHONO
S651	9
S652	CHURCH
S653	RETURN
S654	ACOUSTIC SELECT
S655	0
S656	DANCE
S657	MUTING
S658	ACOUSTIC MEMORY
S659	RESET
S660	HALL

SP SW assembly

S251	SP−A ON/OFF SP−B ON/OFF

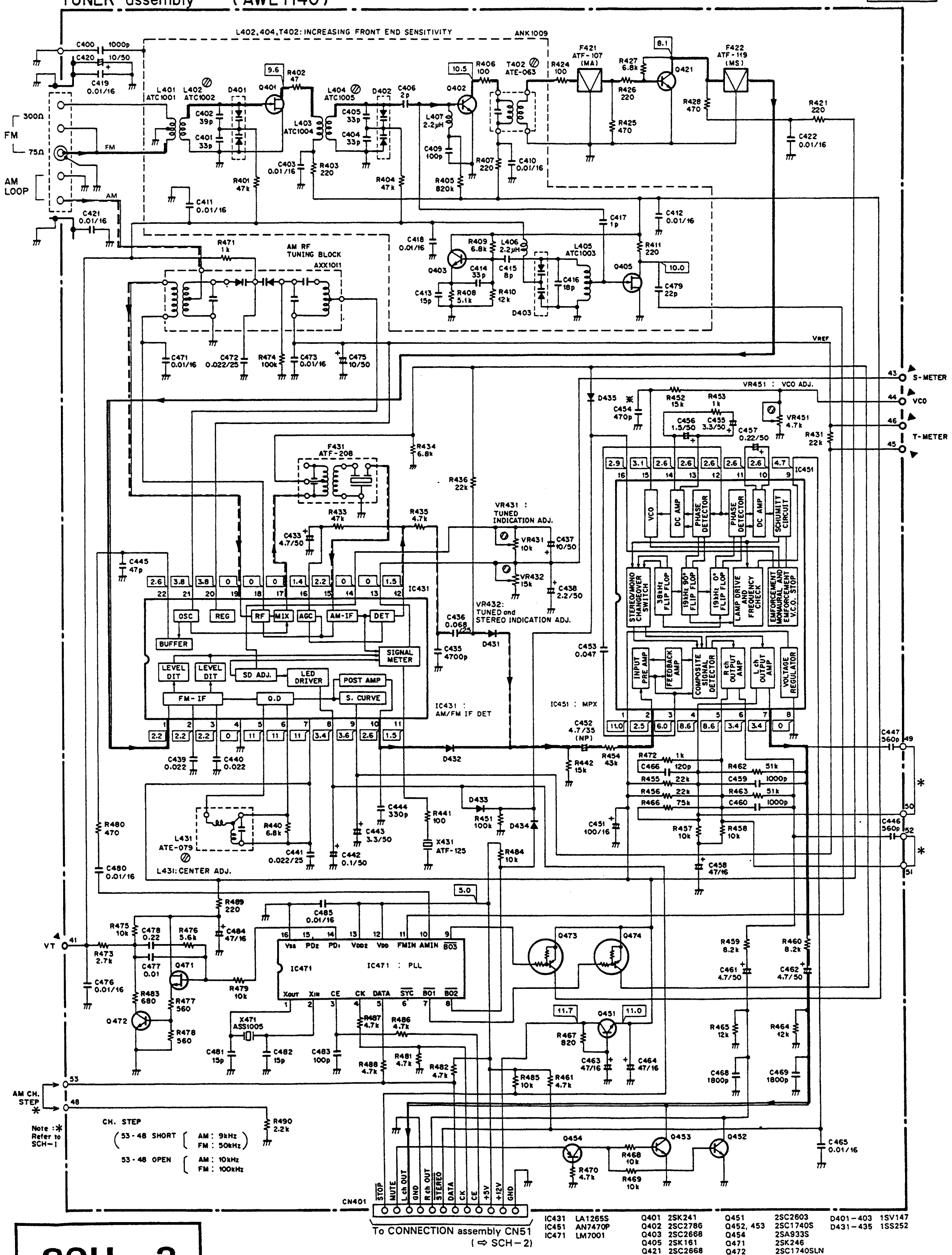
9. **For SCH−☐ on the schematic diagram**
   - SCH−☐ indicates the drawing number of the schematic diagram. (SCH stands for schematic diagram.)

OVERALL SCHEMATIC DIAGRAM

SCH−1

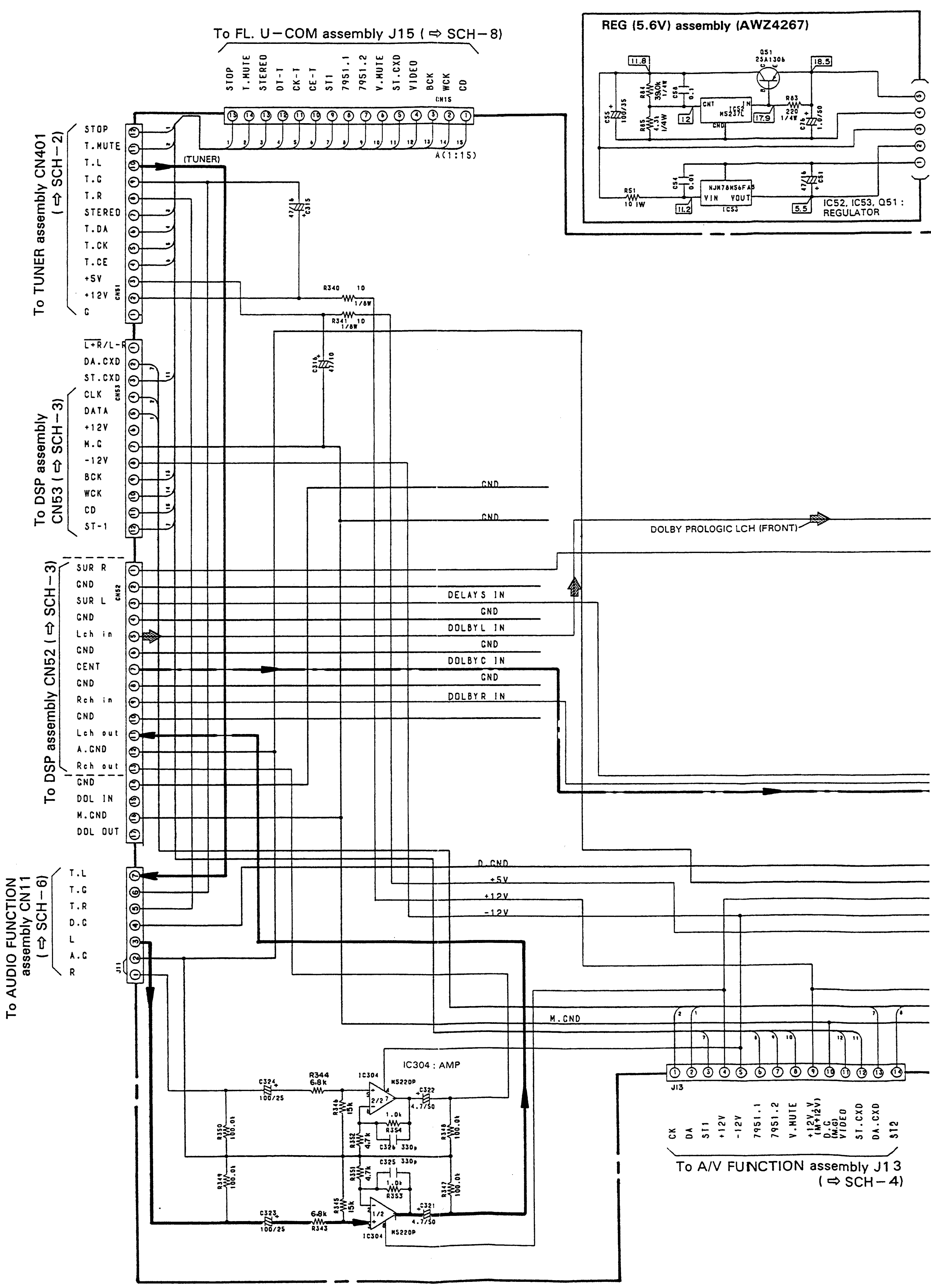
5.2 TUNER ASSEMBLY, CONNECTION ASSEMBLY, REG (12V) ASSEMBLY AND REG (5.6V) ASSEMBLY

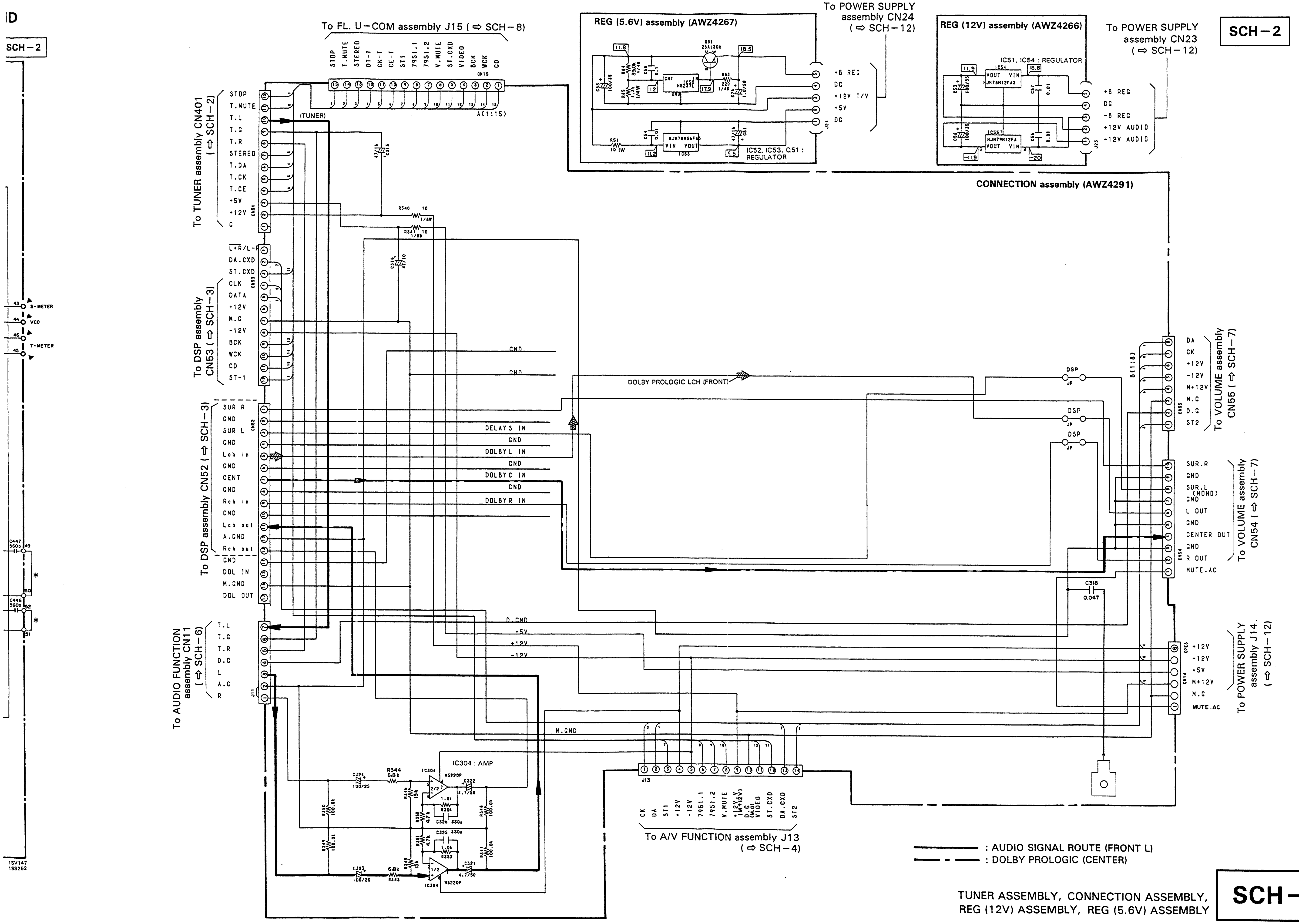
SCH-2


TUNER assembly (AWE1140)
L402,404,T402: INCREASING FRONT END SENSITIVITY
ANK1009
FM
300Ω
75Ω
AM LOOP
AM RF TUNING BLOCK
AXX1011
F421 ATF-107 (MA)
F422 ATF-119 (MS)
F431 ATF-208
VR451 : VCO ADJ.
VR431 : TUNED INDICATION ADJ.
VR432 : TUNED and STEREO INDICATION ADJ.
S-METER
VCO
T-METER
VREF
IC431 : AM/FM IF DET
IC451 : MPX
IC471 : PLL
L431 ATE-079
L431: CENTER ADJ.
X431 ATF-125
X471 ASS1005
VT
AM CH. STEP
Note :* Refer to SCH-1
CH. STEP
53-48 SHORT (AM : 9kHz FM : 50kHz
53-48 OPEN (AM : 10kHz FM : 100kHz
CN401
To CONNECTION assembly CN51 (⇒ SCH-2)
STOP
MUTE
Lch OUT
GND
Rch OUT
STEREO
DATA
CK
CE
+5V
+12V
GND

IC431	LA1265S	Q401	2SK241	Q451	2SC2603	D401-403	1SV147
IC451	AN7470P	Q402	2SC2786	Q452, 453	2SC1740S	D431-435	1SS252
IC471	LM7001	Q403	2SC2668	Q454	2SA933S		
		Q405	2SK161	Q471	2SK246		
		Q421	2SC2668	Q472	2SC1740SLN		
				Q473, 474	RN2201		

SCH-2 TUNER ASSEMBLY, CONNECTION ASSEMBLY, REG (12V) ASSEMBLY, REG (5.6V) ASSEMBLY

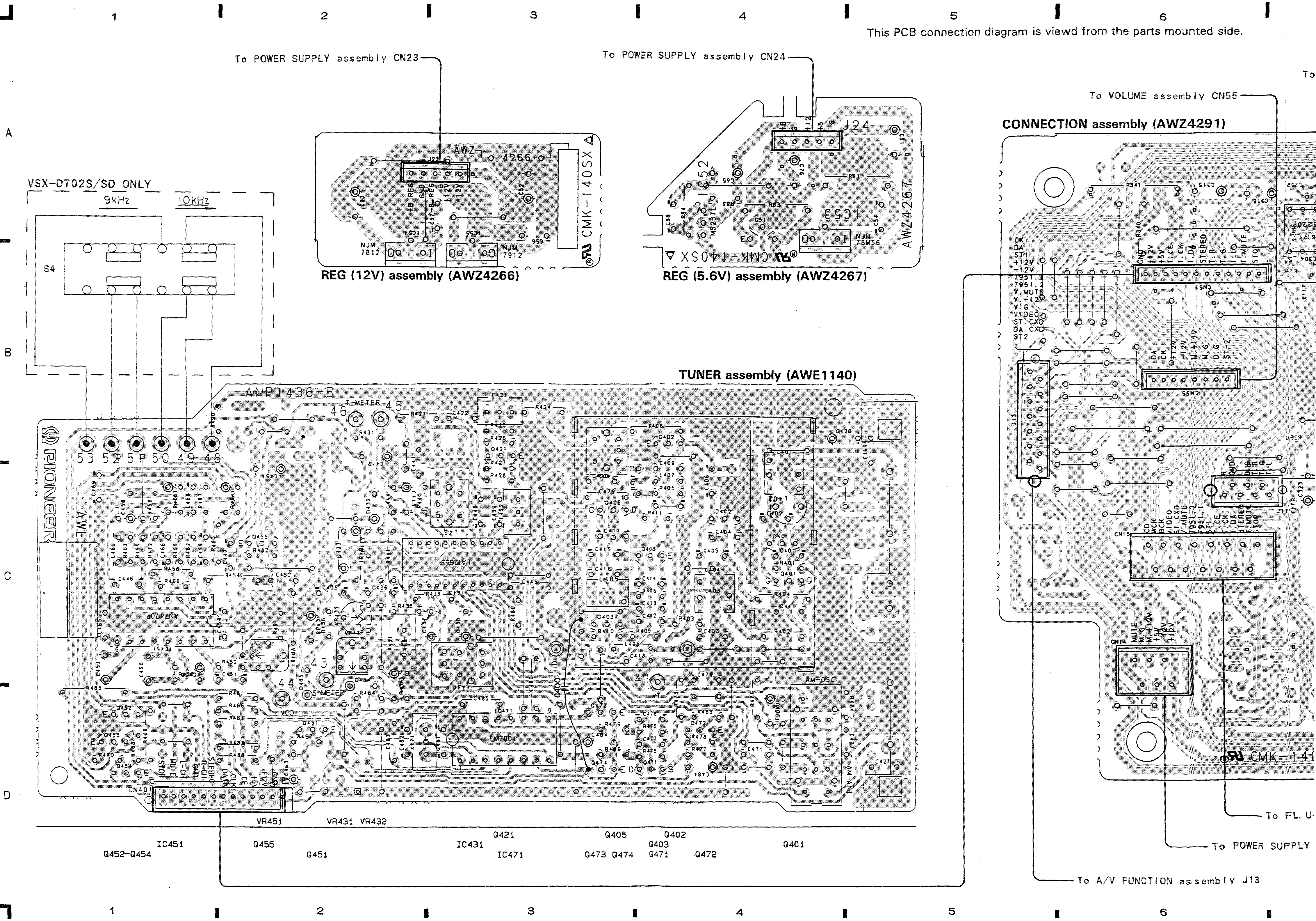

To FL. U-COM assembly J15 (⇒ SCH-8)
STOP
T.MUTE
STEREO
DT-I
CK-T
CE-T
ST1
7951.1
7951.2
V.MUTE
ST.CXD
VIDEO
BCK
WCK
CD
CN15
REG (5.6V) assembly (AWZ4267)
IC52, IC53, Q51 : REGULATOR
NJM78M56FA
To TUNER assembly CN401 (⇒ SCH-2)
T.L
T.C
T.R
T.DA
T.CK
T.CE
+5V
+12V
(TUNER)
To DSP assembly CN53 (⇒ SCH-3)
L+R/L-R
DA.CXD
ST.CXD
CLK
DATA
-12V
M.G
To DSP assembly CN52 (⇒ SCH-3)
SUR R
GND
SUR L
Lch in
CENT
Rch in
Lch out
A.GND
Rch out
DOL IN
M.GND
DOL OUT
DOLBY PROLOGIC LCH (FRONT)
DELAYS IN
DOLBYL IN
DOLBYC IN
DOLBYR IN
To AUDIO FUNCTION assembly CN11 (⇒ SCH-6)
D.C
A.C
J11
D.GND
IC304 : AMP
NJM2068
J13
To A/V FUNCTION assembly J13 (⇒ SCH-4)


To FL. U-COM assembly J15 (⇨ SCH-8)
STOP
T.MUTE
STEREO
DT-T
CK-T
CE-T
ST1
7951.1
7951.2
V.MUTE
ST.CXD
VIDEO
BCK
WCK
CD
CN15
A(1:15)
REG (5.6V) assembly (AWZ4267)
Q51 2SA1306
IC52 NS237C
IC53 NJM78M5FA
IC52, IC53, Q51 : REGULATOR
R51 10 1W
R83 220 1/4W
11.8
18.5
12
17.9
11.2
5.5
To POWER SUPPLY assembly CN24 (⇨ SCH-12)
+B REC
DC
+12V T/V
+5V
DC
J24
REG (12V) assembly (AWZ4266)
IC51, IC54 : REGULATOR
IC54 NJM78M12FA3
IC55 NJM79M12FA
VOUT VIN
11.9
18.6
-11.9
-20
J23
To POWER SUPPLY assembly CN23 (⇨ SCH-12)
+B REC
DC
-B REC
+12V AUDIO
-12V AUDIO
CONNECTION assembly (AWZ4291)
To TUNER assembly CN401 (⇨ SCH-2)
STOP
T.MUTE
T.L
T.C
T.R
STEREO
T.DA
T.CK
T.CE
+5V
+12V
C
CN51
(TUNER)
R340 10 1/8W
R341 10 1/8W
C315
C316
To DSP assembly CN53 (⇨ SCH-3)
L+R/L-R
DA.CXD
ST.CXD
CLK
DATA
+12V
M.C
-12V
BCK
WCK
CD
ST-1
CN53
GND
GND
DOLBY PROLOGIC LCH (FRONT)
To DSP assembly CN52 (⇨ SCH-3)
SUR R
GND
SUR L
GND
Lch in
GND
CENT
GND
Rch in
GND
Lch out
A.GND
Rch out
GND
DOL IN
M.GND
DOL OUT
CN52
DELAYS IN
GND
DOLBYL IN
GND
DOLBYC IN
GND
DOLBYR IN
DSP JP
DSP JP
DSP JP
To VOLUME assembly CN55 (⇨ SCH-7)
DA
CK
+12V
-12V
M+12V
M.C
D.C
ST2
CN55
B(1:8)
To VOLUME assembly CN54 (⇨ SCH-7)
SUR.R
GND
SUR.L (MONO)
GND
L OUT
GND
CENTER OUT
GND
R OUT
MUTE.AC
CN54
C318 0.047
To AUDIO FUNCTION assembly CN11 (⇨ SCH-6)
T.L
T.C
T.R
D.C
L
A.C
R
J11
D.GND
+5V
+12V
-12V
M.GND
To POWER SUPPLY assembly J14 (⇨ SCH-12)
+12V
-12V
+5V
M+12V
M.C
MUTE.AC
CN14
IC304 : AMP
IC304 NS220P
C324 100/25
R344 6.8k
C322 4.7/50
C323 100/25
R343 6.8k
C321 4.7/50
C326 330p
C325 330p
R354 1.0k
R353 1.0k
R350 100.0k
R349 100.0k
R348 100.0k
R347 100.0k
4.7k
15k
J13
CK
DA
ST1
+12V
-12V
7951.1
7951.2
V.MUTE
+12V.V (M+12V)
D.C (M.G)
VIDEO
ST.CXD
DA.CXD
ST2
To A/V FUNCTION assembly J13 (⇨ SCH-4)
S-METER
VCO
T-METER
C447 560p
C446 560p
1SV147
1SS252
: AUDIO SIGNAL ROUTE (FRONT L)
: DOLBY PROLOGIC (CENTER)

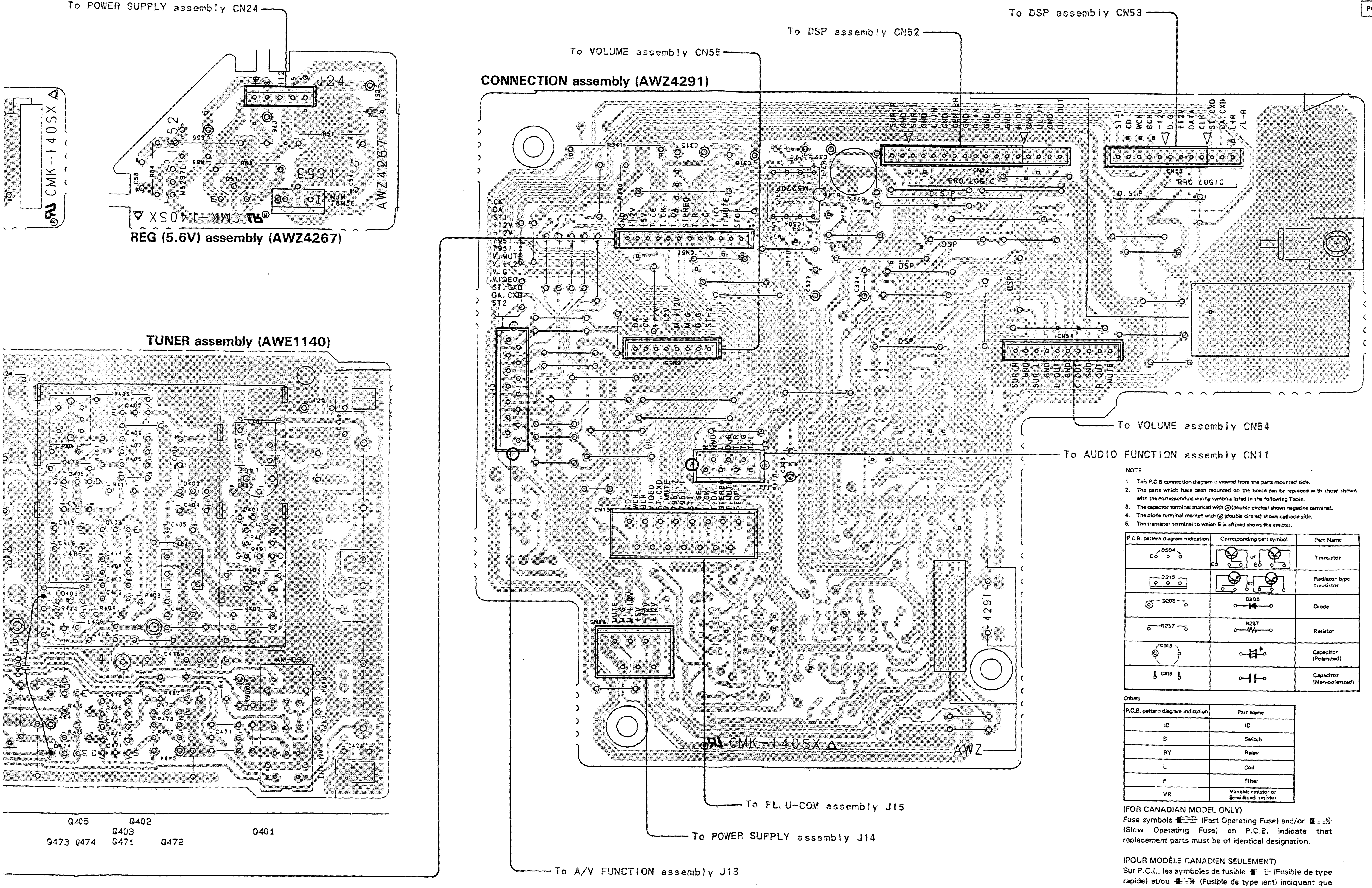
TUNER ASSEMBLY, CONNECTION ASSEMBLY,
REG (12V) ASSEMBLY, REG (5.6V) ASSEMBLY

SCH-2

This PCB connection diagram is viewd from the parts mounted side.


1
2
3
4
5
6
A
B
C
D
To POWER SUPPLY assembly CN23
To POWER SUPPLY assembly CN24
To VOLUME assembly CN55
To
CONNECTION assembly (AWZ4291)
REG (12V) assembly (AWZ4266)
REG (5.6V) assembly (AWZ4267)
VSX-D702S/SD ONLY
9kHz
10kHz
S4
TUNER assembly (AWE1140)
ANP1436-B
AWZ-4266
CMK-140SX
AWZ4267
J23
J24
NJM 7812
NJM 7912
NJM 78M56
IC53
LA1265S
AN7470P
LM7001
CN401
CN51
CN55
CN14
CN15
J11
J13
T-METER
S-METER
AM-OSC
PIONEER
To FL. U-
To POWER SUPPLY
To A/V FUNCTION assembly J13
VR451
VR431 VR432
Q452-Q454
IC451
Q455
Q451
IC431
Q421
IC471
Q405
Q473 Q474
Q402
Q403
Q471
Q472
Q401

This PCB connection diagram is viewd from the parts mounted side.


To POWER SUPPLY assembly CN24
To VOLUME assembly CN55
To DSP assembly CN52
To DSP assembly CN53
CONNECTION assembly (AWZ4291)
REG (5.6V) assembly (AWZ4267)
TUNER assembly (AWE1140)
J24
IC52
IC53
CN51
CN52
CN53
CN54
CN55
J13
J11
CN15
CN14
PRO LOGIC
D.S.P
DSP
To VOLUME assembly CN54
To AUDIO FUNCTION assembly CN11
To FL. U-COM assembly J15
To POWER SUPPLY assembly J14
To A/V FUNCTION assembly J13
CMK-140SX
AM-OSC
Q405
Q402
Q403
Q401
Q473
Q474
Q471
Q472
A
B
C
D
4
5
6
7
8
9

NOTE

1. This P.C.B connection diagram is viewed from the parts mounted side.
2. The parts which have been mounted on the board can be replaced with those shown with the corresponding wiring symbols listed in the following Table.
3. The capacitor terminal marked with ◎ (double circles) shows negatine terminal.
4. The diode terminal marked with ◎ (double circles) shows cathode side.
5. The transistor terminal to which E is affixed shows the emitter.

P.C.B. pattern diagram indication	Corresponding part symbol	Part Name
0504 E	E or E	Transistor
0215	or	Radiator type transistor
D203	D203	Diode
R237	R237	Resistor
C513	+	Capacitor (Polarized)
C518		Capacitor (Non-polarized)

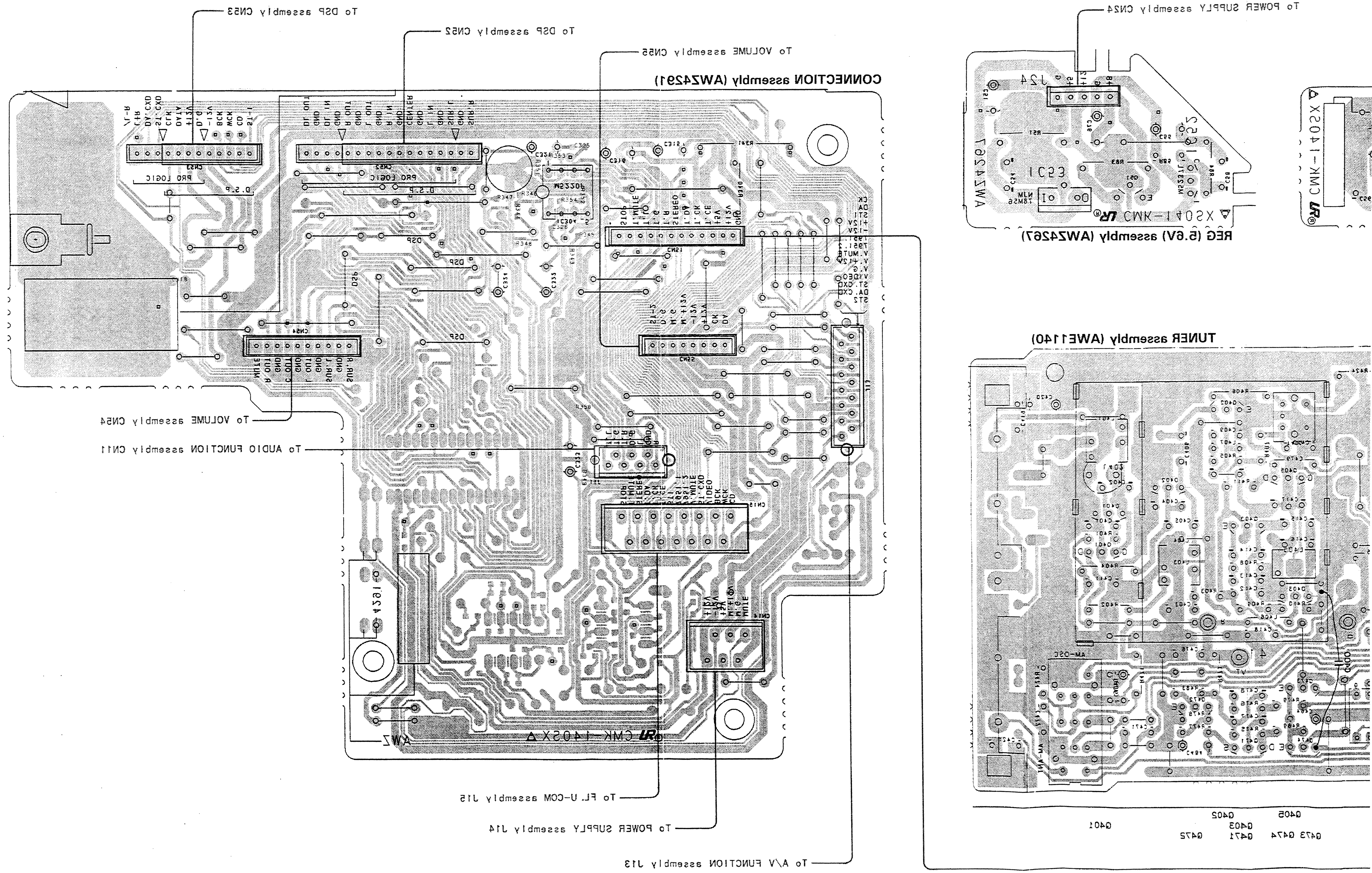
Others

P.C.B. pattern diagram indication	Part Name
IC	IC
S	Switch
RY	Relay
L	Coil
F	Filter
VR	Variable resistor or Semi-fixed resistor

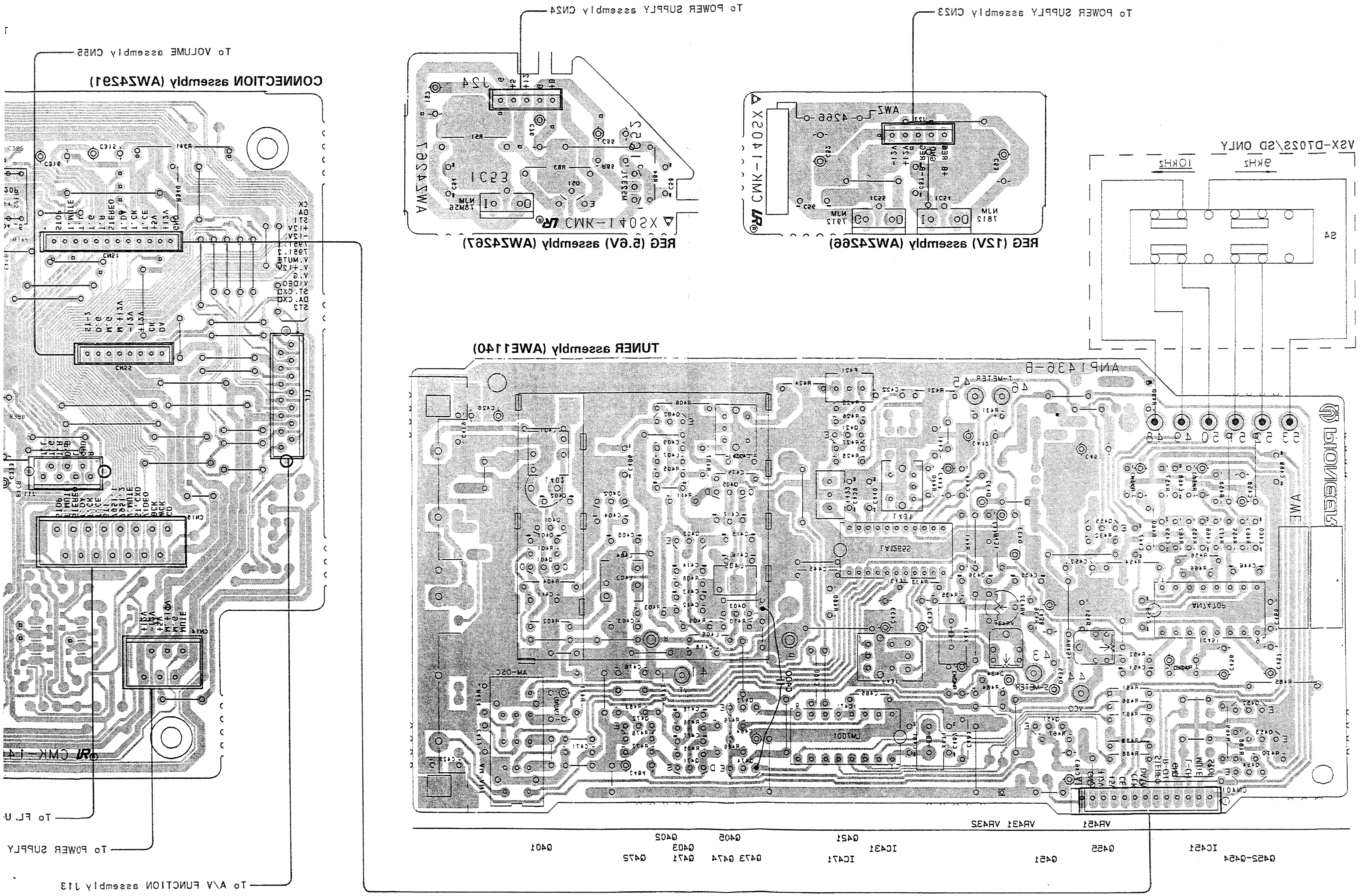
(FOR CANADIAN MODEL ONLY)
Fuse symbols (Fast Operating Fuse) and/or (Slow Operating Fuse) on P.C.B. indicate that replacement parts must be of identical designation.

(POUR MODÈLE CANADIEN SEULEMENT)
Sur P.C.I., les symboles de fusible (Fusible de type rapide) et/ou (Fusible de type lent) indiquent que les pièces de remplacement doivent avoir la même désignation.

This PCB connection diagram is viwed from the foil side.


To DSP assembly CN53
To DSP assembly CN52
To VOLUME assembly CN55
CONNECTION assembly (AWZ4291)
To VOLUME assembly CN54
To AUDIO FUNCTION assembly CN11
To FL U-COM assembly J15
To POWER SUPPLY assembly J14
To A/V FUNCTION assembly J13
To POWER SUPPLY assembly CN24
REG (5.6V) assembly (AWZ4267)
TUNER assembly (AWE1140)
CN53
CN52
CN51
CN54
CN55
CN11
CN14
CN13
J13
J24
IC531
PRO LOGIC
D.S.P
DSP
CMK-1405X
CMK-1405X
AWZ
Q401
Q402
Q403
Q405
Q471
Q472
Q473
Q474
AM-OSC
A
B
C
D
8
7
6
5
4
3

This PCB connection diagram is viwed from the foil side.


To POWER SUPPLY assembly CN24
To POWER SUPPLY assembly CN23
To VOLUME assembly CN55
CONNECTION assembly (AWZ4291)
REG (5.6V) assembly (AWZ4267)
REG (12V) assembly (AWZ4266)
VSX-D702S/SD ONLY
9kHz
10kHz
S4
TUNER assembly (AWE1140)
IC531
IC551
IC501
LA1832S
LA1267
LM7001
IC451
IC431
IC471
VR451
VR431 VR432
Q455
Q452-Q454
Q451
Q421
Q405
Q473 Q474
Q402
Q403
Q471
Q472
Q401
To FL U
To POWER SUPPLY
To A/V FUNCTION assembly J13

A

B

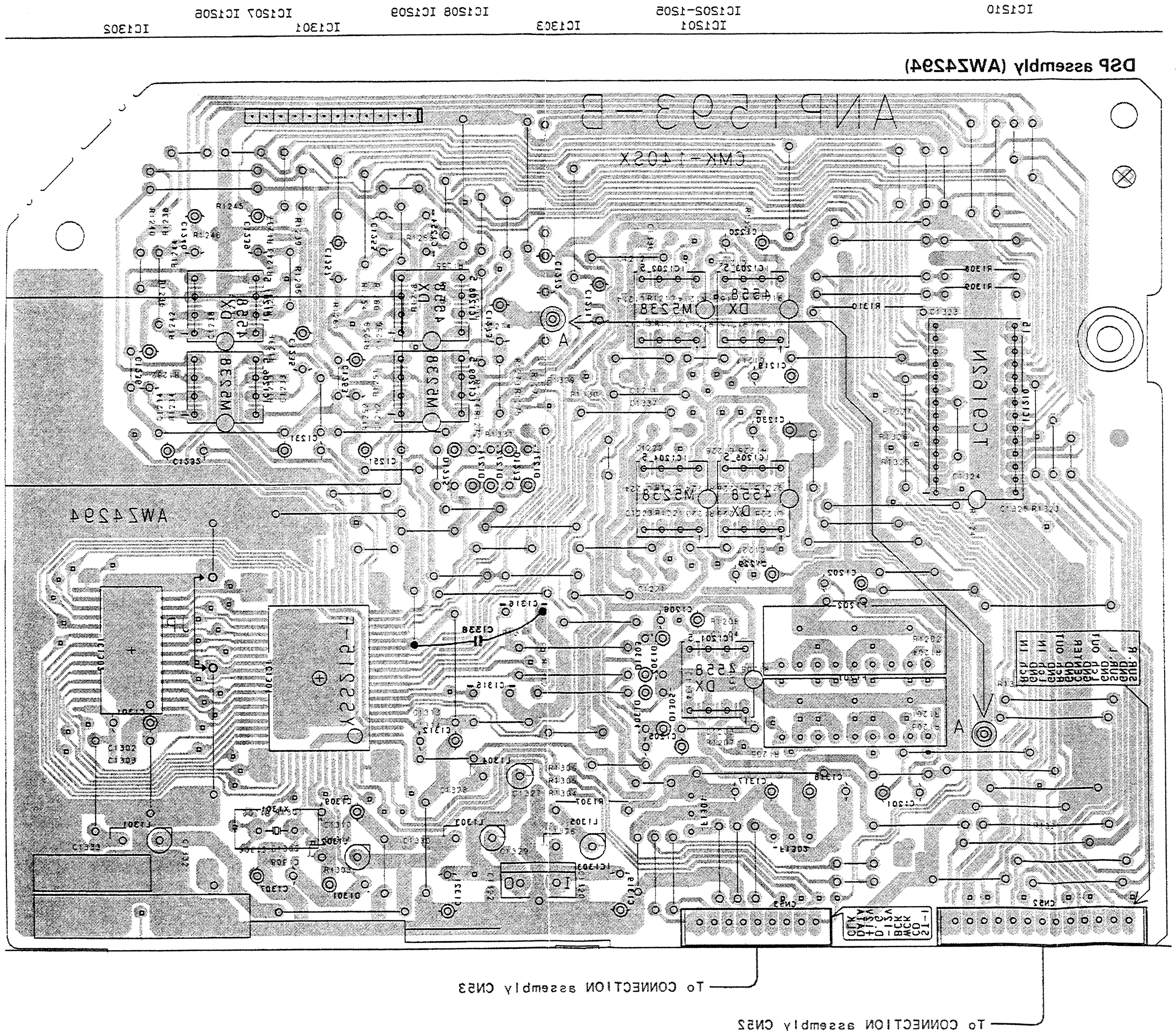
C

D

5.3 DSP ASSEMBLY

This PCB connection diagram is viwed from the foil side.

DSP assembly (AWZ4294)

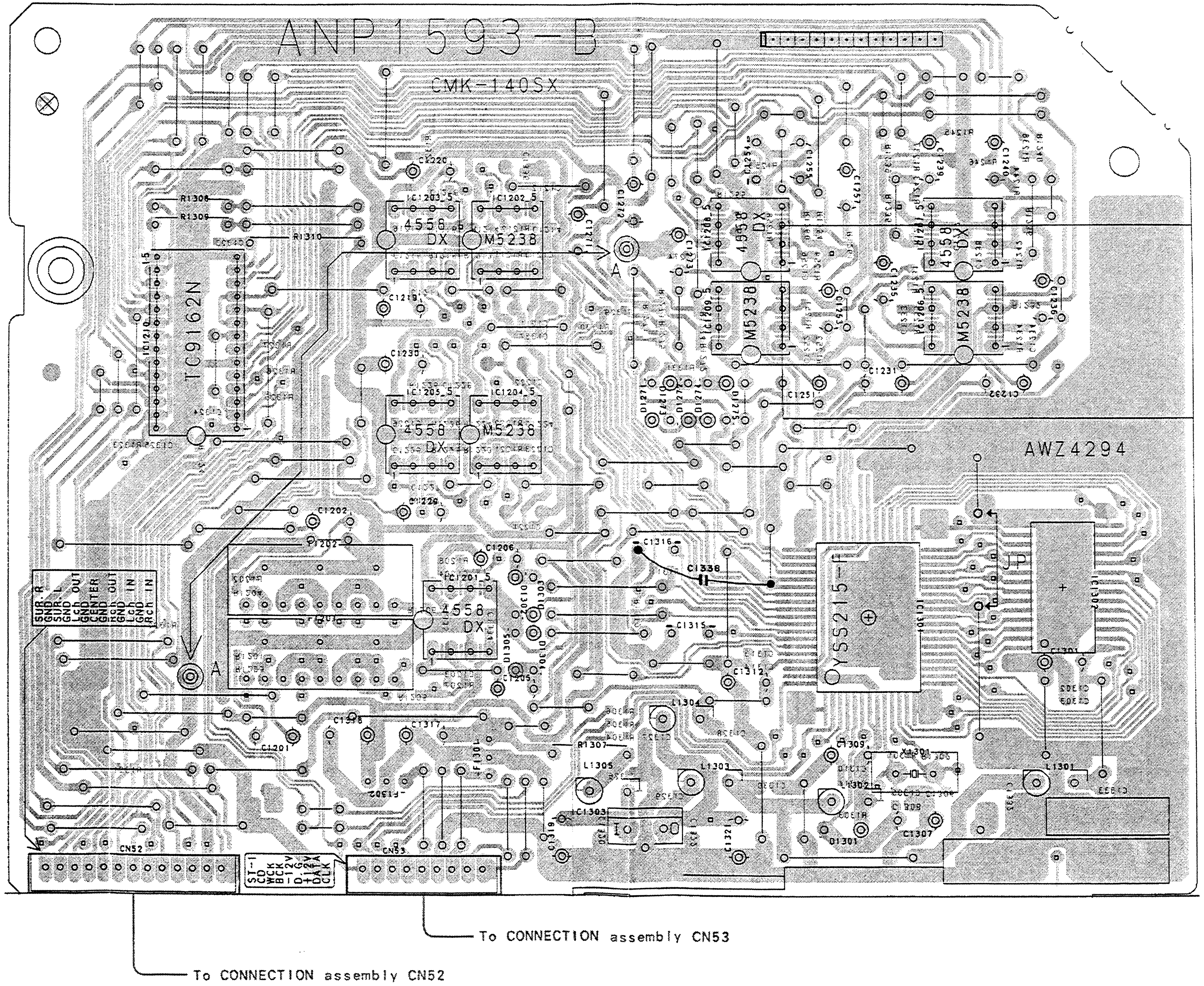

IC1210
IC1202–1205
IC1201
IC1303
IC1208 IC1209
IC1207 IC1206
IC1301
IC1302
ANP1593-B
CMK-1405X
AWZ4294
To CONNECTION assembly CN53
To CONNECTION assembly CN52

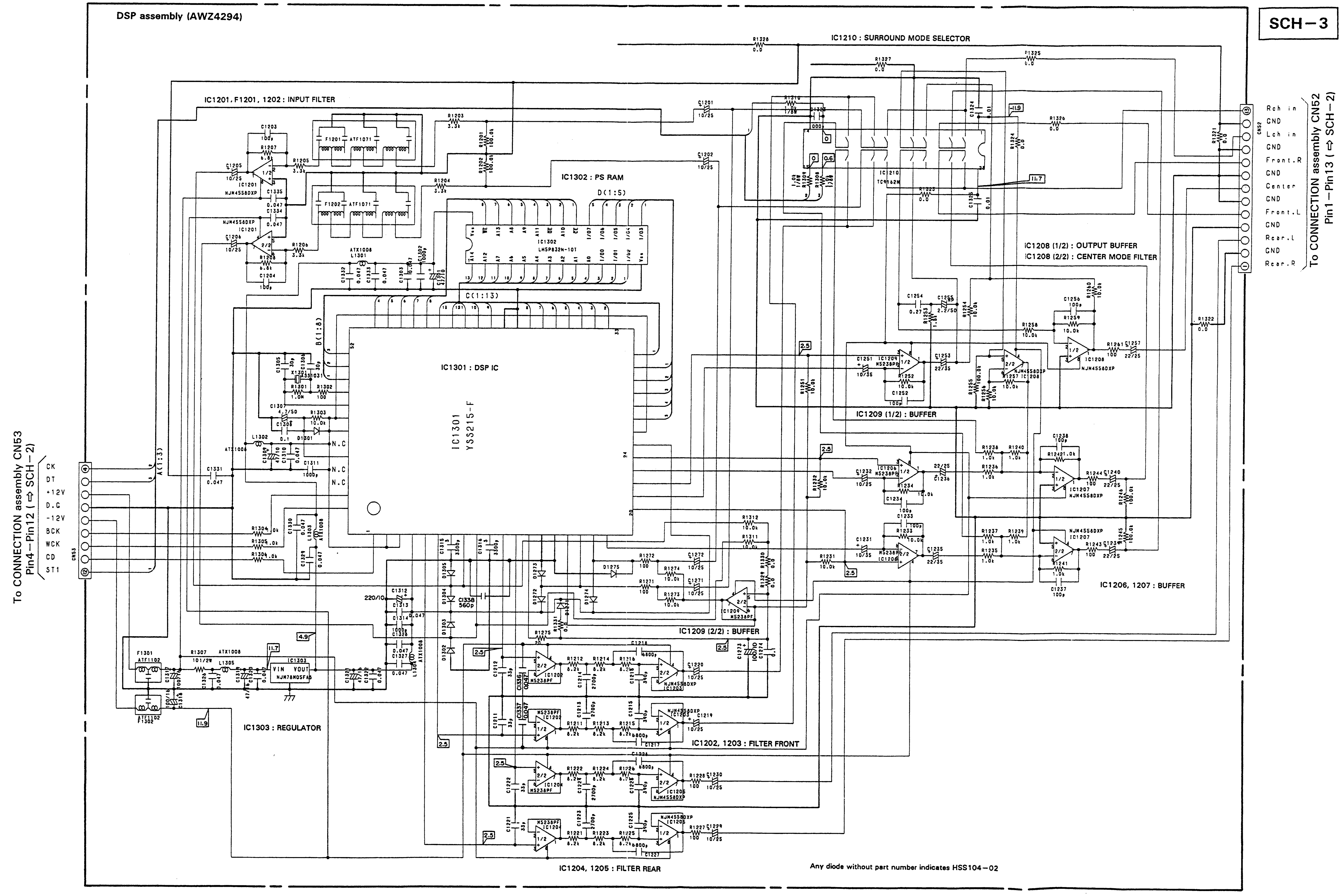
5.3 DSP ASSEMBLY

This PCB connection diagram is viewd from the parts mounted side.

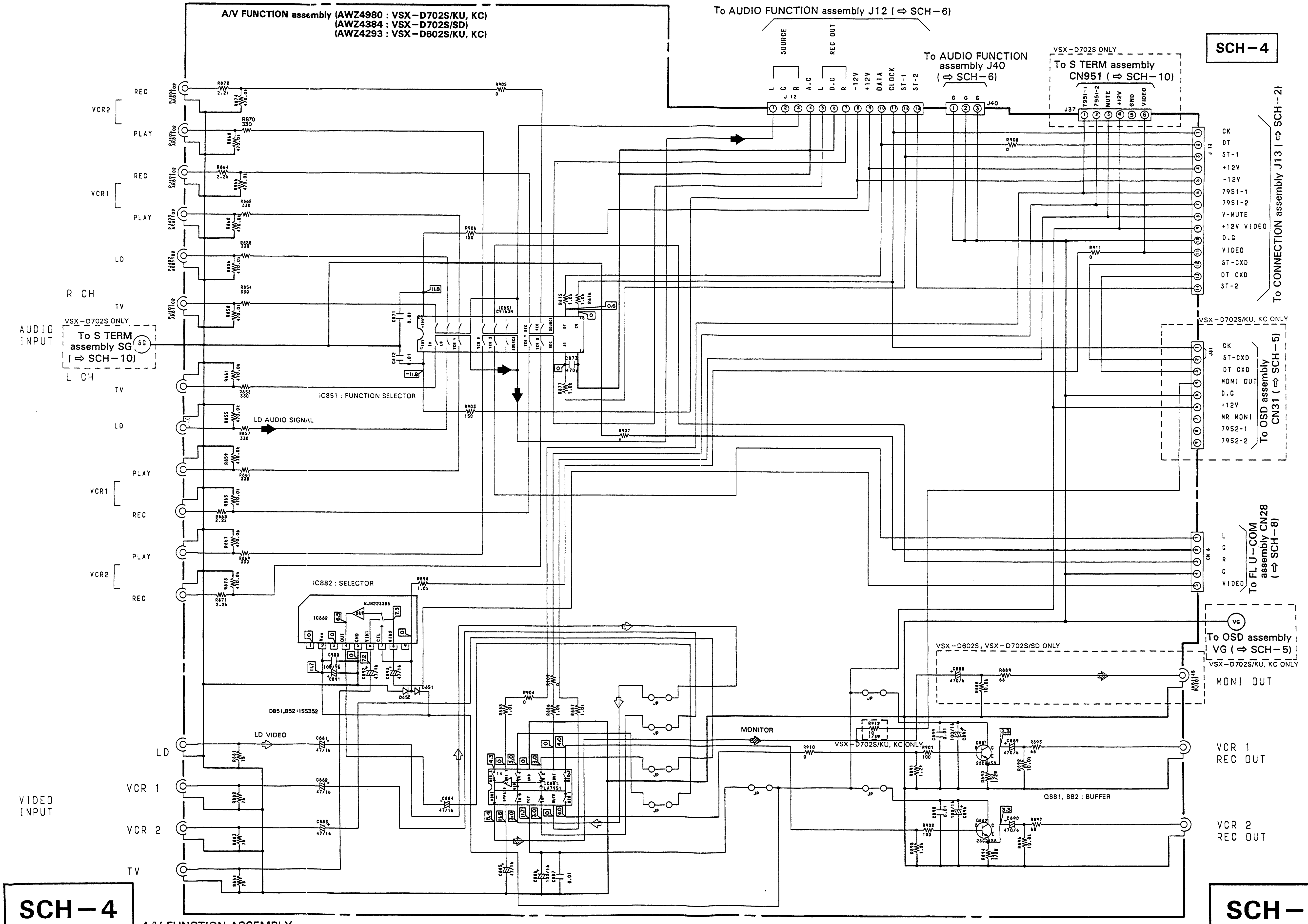
IC1210 IC1202–1205 IC1201 IC1303 IC1208 IC1209 IC1301 IC1207 IC1206 IC1302

DSP assembly (AWZ4294)


ANP1593-B
CMK-140SX
AWZ4294
TC9162N
IC1210
R1308
R1309
R1310
IC1203_5
IC1202_5
IC1205_5
IC1204_5
IC1201_5
IC1208_5
IC1209_5
IC1207_5
IC1206_5
4558 DX
M5238
YSS215-F
IC1301
IC1302
JP
A
C1220
C1219
C1230
C1226
C1202
C1206
C1201
C1205
C1231
C1232
C1251
C1316
C1338
C1315
C1312
C1317
C1318
C1309
C1307
C1319
C1321
L1301
L1303
L1304
L1305
R1307
D1301
X1301
IC1303
SUR. R
GND
SUR. L
GND
Lch OUT
GND
CENTER
GND
Rch OUT
GND
Lch IN
GND
Rch IN
CN52
CN53
ST-1
CD
WCK
BCK
-12V
D+5V
+12V
DATA
CLK
To CONNECTION assembly CN53
To CONNECTION assembly CN52

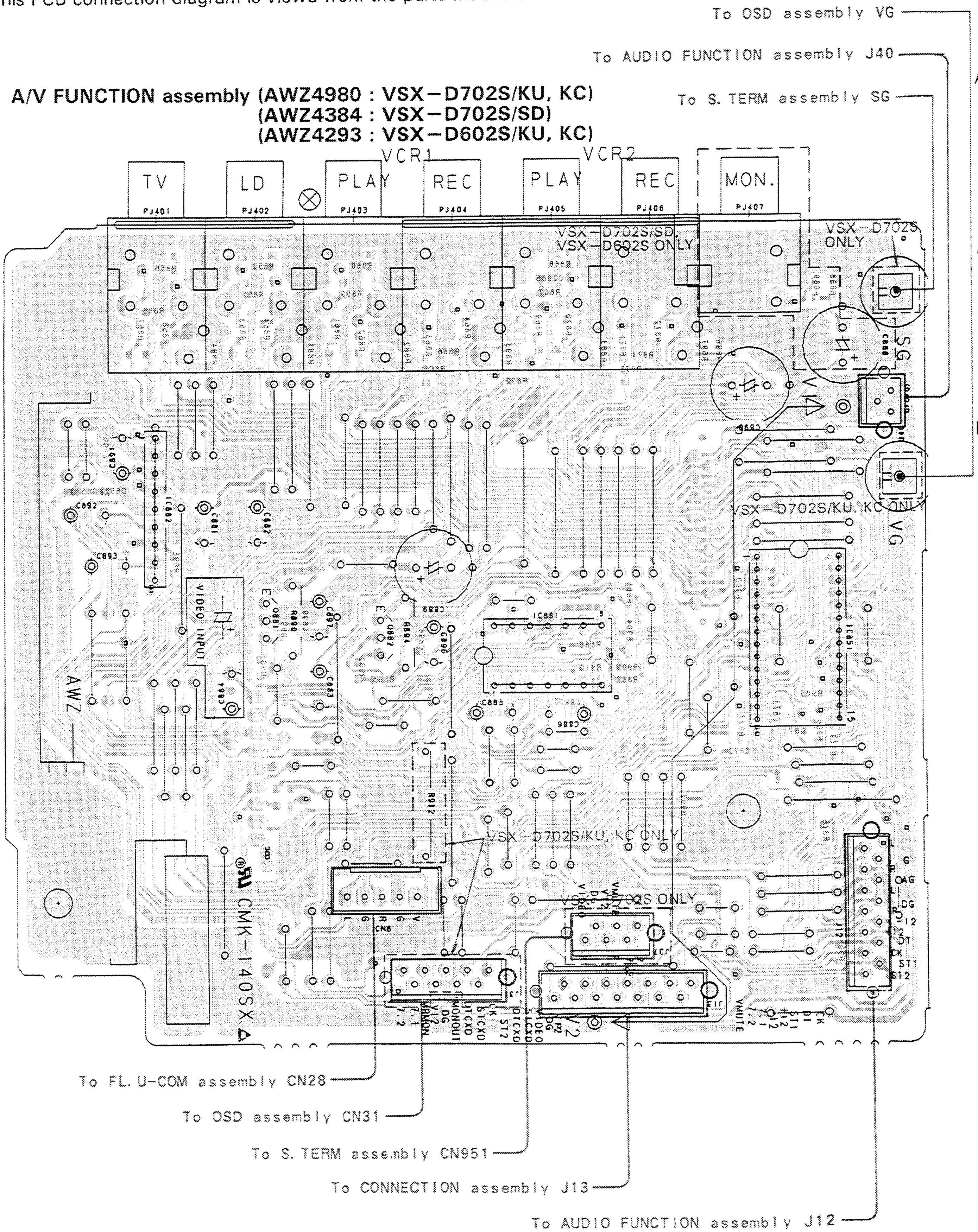

DSP assembly (AWZ4294)
IC1210 : SURROUND MODE SELECTOR
IC1201, F1201, 1202 : INPUT FILTER
IC1302 : PS RAM
IC1302 LH5P832N-10T
D(1:5)
C(1:13)
B(1:8)
A(1:3)
IC1301 : DSP IC
IC1301 YSS215-F
IC1208 (1/2) : OUTPUT BUFFER
IC1208 (2/2) : CENTER MODE FILTER
IC1209 (1/2) : BUFFER
IC1209 (2/2) : BUFFER
IC1206, 1207 : BUFFER
IC1303 : REGULATOR
IC1202, 1203 : FILTER FRONT
IC1204, 1205 : FILTER REAR
Any diode without part number indicates HSS104-02
CN53
CK
DT
+12V
D.G
-12V
BCK
WCK
CD
ST1
To CONNECTION assembly CN53 Pin4-Pin12 (⇨ SCH-2)
CN52
Rch in
GND
Lch in
GND
Front.R
GND
Center
GND
Front.L
GND
Rear.L
GND
Rear.R
To CONNECTION assembly CN52 Pin1-Pin13 (⇨ SCH-2)
IC1303 VIN VOUT NJM78M05FA
TC9162N
NJM4558DXP
NJM4558DXP
NM5238PF
F1201 ATF1071
F1202 ATF1071
F1301 ATF1102
F1302 ATF1102
ATX1008
L1301
X1301
N.C
N.C
N.C
11.9
11.7
4.9
2.5

5.4 A/V FUNCTION ASSEMBLY


A/V FUNCTION assembly (AWZ4980 : VSX-D702S/KU, KC)
(AWZ4384 : VSX-D702S/SD)
(AWZ4293 : VSX-D602S/KU, KC)
To AUDIO FUNCTION assembly J12 (⇨ SCH-6)
SOURCE
REC OUT
L G R A.C L D.C R -12V +12V DATA CLOCK ST-1 ST-2
J12
To AUDIO FUNCTION assembly J40 (⇨ SCH-6)
G G G
J40
VSX-D702S ONLY
To S TERM assembly CN951 (⇨ SCH-10)
7951-1 7951-2 MUTE +12V GND VIDEO
J37
SCH-4
CK
DT
ST-1
+12V
-12V
7951-1
7951-2
V-MUTE
+12V VIDEO
D.G
VIDEO
ST-CXD
DT CXD
ST-2
To CONNECTION assembly J13 (⇨ SCH-2)
VSX-D702S/KU, KC ONLY
CK
ST-CXD
DT CXD
MONI OUT
D.G
+12V
MR MONI
7952-1
7952-2
To OSD assembly CN31 (⇨ SCH-5)
L
G
R
G
VIDEO
To FL U-COM assembly CN28 (⇨ SCH-8)
VG
To OSD assembly VG (⇨ SCH-5)
VSX-D602S, VSX-D702S/SD ONLY
VSX-D702S/KU, KC ONLY
MONI OUT
VCR 1 REC OUT
VCR 2 REC OUT
Q881, 882 : BUFFER
MONITOR
VSX-D702S/KU, KC ONLY
REC
VCR2
PLAY
REC
VCR1
PLAY
LD
R CH
TV
AUDIO INPUT
VSX-D702S ONLY
To S TERM assembly SG (⇨ SCH-10)
SG
L CH
TV
LD
LD AUDIO SIGNAL
PLAY
VCR1
REC
PLAY
VCR2
REC
IC851 : FUNCTION SELECTOR
IC851 TC9163N
IC882 : SELECTOR
IC882
NJM2233BS
D851,852:1SS352
LD VIDEO
VIDEO INPUT
LD
VCR 1
VCR 2
TV
IC881 LA7951
JP
A/V FUNCTION ASSEMBLY

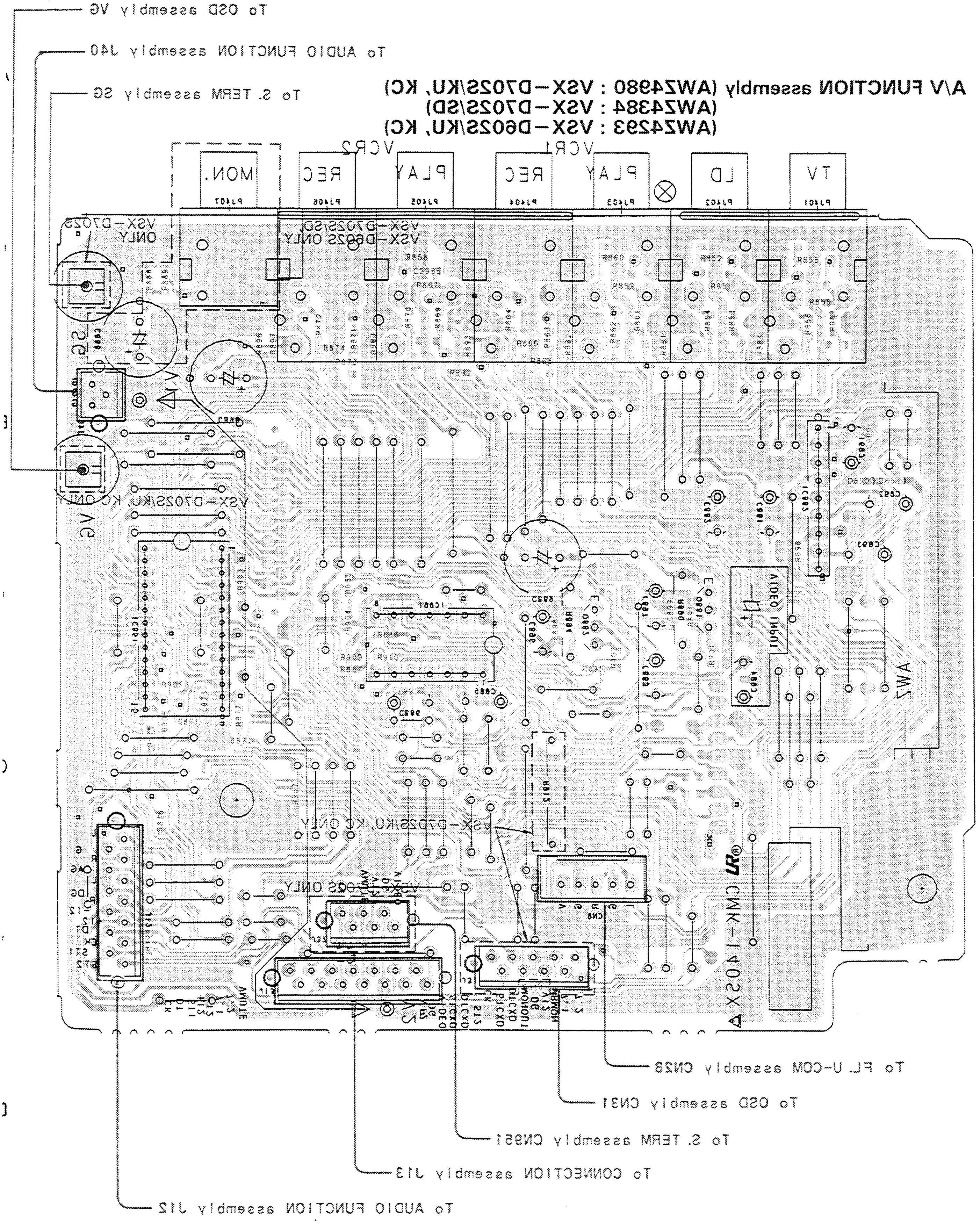
This PCB connection diagram is viewd from the parts mounted side.

A **A/V FUNCTION assembly (AWZ4980 : VSX−D702S/KU, KC)**
(AWZ4384 : VSX−D702S/SD)
(AWZ4293 : VSX−D602S/KU, KC)

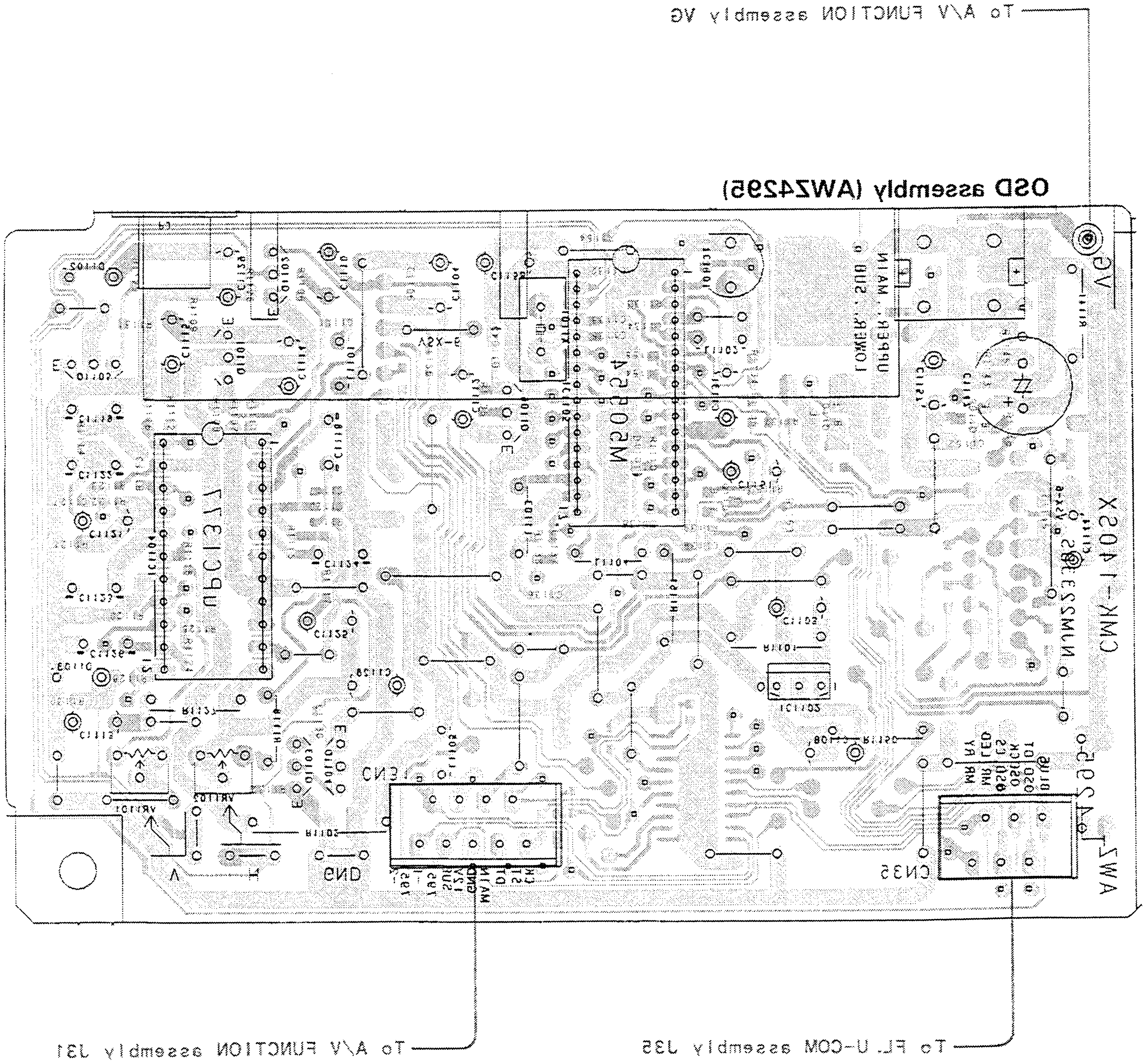

To OSD assembly VG
To AUDIO FUNCTION assembly J40
To S.TERM assembly SG
VCR1
VCR2
TV
LD
PLAY
REC
PLAY
REC
MON.
PJ401
PJ402
PJ403
PJ404
PJ405
PJ406
PJ407
VSX−D702S/SD
VSX−D602S ONLY
VSX−D702S ONLY
SG
V14
VSX−D702S/KU, KC ONLY
VG
IC682
IC881
IC651
C691
C692
C693
C681
C682
C683
C696
C885
C886
C888
R912
VIDEO INPUT
AWZ
CMK-140SX
VSX−D702S/KU, KC ONLY
VSX−D702S ONLY
CN8
J12
J11
V2
To FL.U-COM assembly CN28
To OSD assembly CN31
To S.TERM assembly CN951
To CONNECTION assembly J13
To AUDIO FUNCTION assembly J12
B
C
D

This PCB connection diagram is viwed from the foil side.

A/V FUNCTION assembly (AWZ4980 : VSX-D702S/KU, KC)
(AWZ4384 : VSX-D702S/SD)
(AWZ4293 : VSX-D602S/KU, KC)


To OSD assembly VG
To AUDIO FUNCTION assembly J40
To S.TERM assembly SG
VCR2
VCR1
MON.
REC
PLAY
REC
PLAY
LD
TV
VSX-D702S ONLY
VSX-D702S/SD
VSX-D602S ONLY
SG
VSX-D702S/KU, KC ONLY
VG
VIDEO INPUT
AWZ
VSX-D702S/KU, KC ONLY
VSX-D602S ONLY
CMK-1405X
To FL U-COM assembly CN28
To OSD assembly CN31
To S.TERM assembly CN951
To CONNECTION assembly J13
To AUDIO FUNCTION assembly J12

5.5 OSD ASSEMBLY

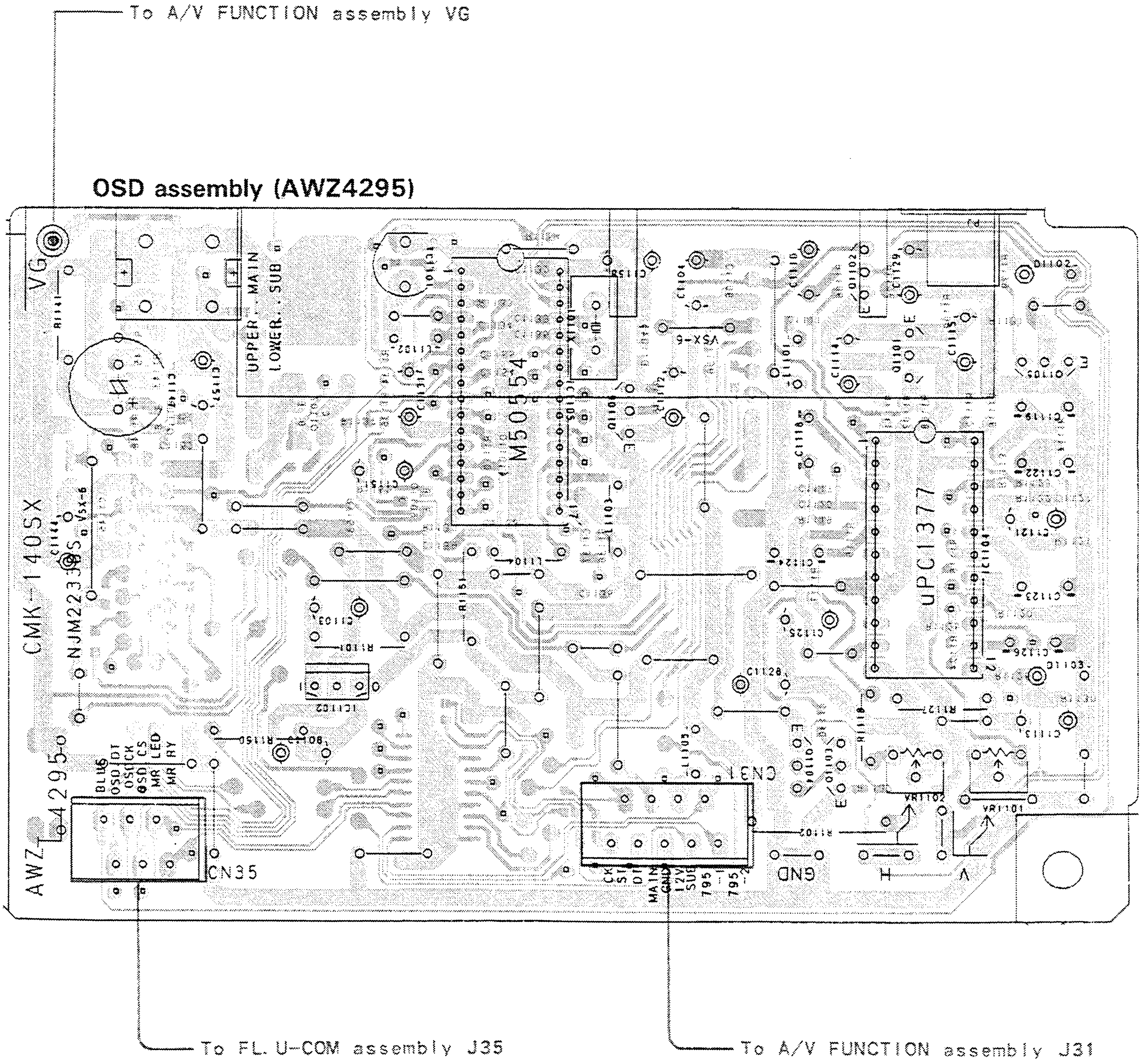

To A/V FUNCTION assembly VG
OSD assembly (AWZ4295)
VG
CN31
CN35
GND
V
H
UPC1371
AWZ4295
CMK-140SA
To A/V FUNCTION assembly J31
To FL U-COM assembly J35

This PCB connection diagram is viwed from the foil side.

5.5 OSD ASSEMBLY

PCB-4

A


To A/V FUNCTION assembly VG
OSD assembly (AWZ4295)
VG
UPPER . . MAIN
LOWER . . SUB
M50554
UPC1377
CMK-1140SX
NJM2233BS
AWZ 4295
CN35
BLUE
OSD DT
OSD CK
OSD CS
MR LED
MR RY
CN31
CK
ST
DT
MAIN
GND
12V
SUB
GND
IC1102
VR1102
VR1101
H
V
To FL. U-COM assembly J35
To A/V FUNCTION assembly J31

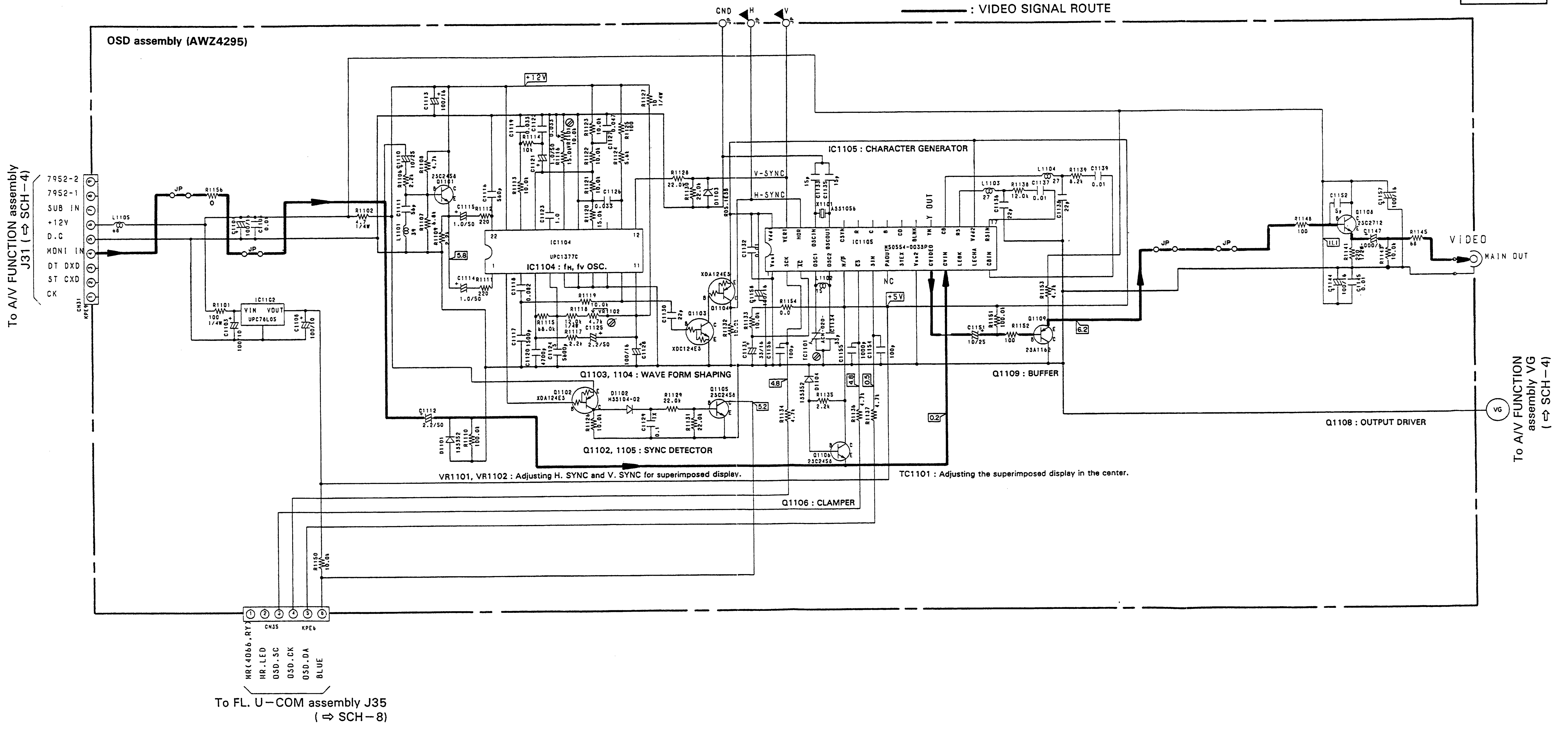
B

C

D

This PCB connection diagram is viewd from the parts mounted side.

SCH-5

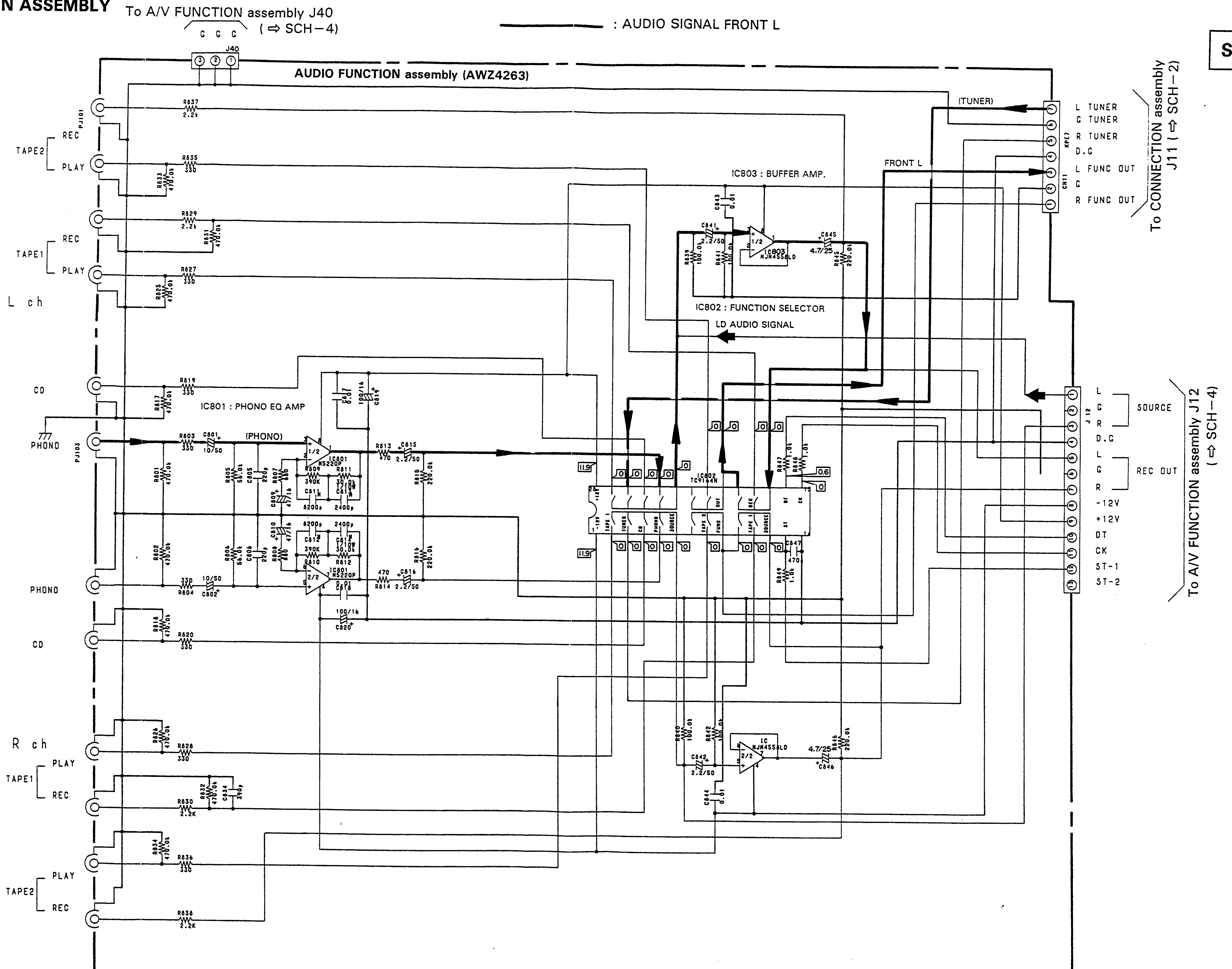

: VIDEO SIGNAL ROUTE
OSD assembly (AWZ4295)
GND
H
V
To A/V FUNCTION assembly J31 (⇨ SCH-4)
7952-2
7952-1
SUB IN
+12V
D.C
MONI IN
DT DXD
ST CXD
CK
CN31
KPE9
JP
R1156
L1105
R1101
IC1102
VIN VOUT
UPC78L05
+12V
R1102
2SC2458
Q1101
IC1104
UPC1377C
IC1104 : fH, fv OSC.
5.8
IC1105 : CHARACTER GENERATOR
V-SYNC
H-SYNC
Y OUT
M50554-003SP
IC1105
NC
+5V
XDA124ES
Q1104
Q1103
XDC124ES
Q1103, 1104 : WAVE FORM SHAPING
Q1102
XDA124ES
D1102
HZS104-02
Q1105
2SC2458
5.2
Q1102, 1105 : SYNC DETECTOR
4.8
4.8
0.5
0.2
Q1106
2SC2458
VR1101, VR1102 : Adjusting H. SYNC and V. SYNC for superimposed display.
TC1101 : Adjusting the superimposed display in the center.
Q1106 : CLAMPER
Q1109
2SA1162
6.2
Q1109 : BUFFER
Q1108
2SC2712
11.1
JP
JP
VIDEO
MAIN OUT
VG
Q1108 : OUTPUT DRIVER
To A/V FUNCTION assembly VG (⇨ SCH-4)
CN35
KPE6
MR(4066,RY)
HR.LED
OSD.SC
OSD.CK
OSD.DA
BLUE
To FL. U-COM assembly J35 (⇨ SCH-8)

A B C D

SCH-5 OSD ASSEMBLY

OSD ASSEMBLY **SCH-5**

5.6 AUDIO FUNCTION ASSEMBLY

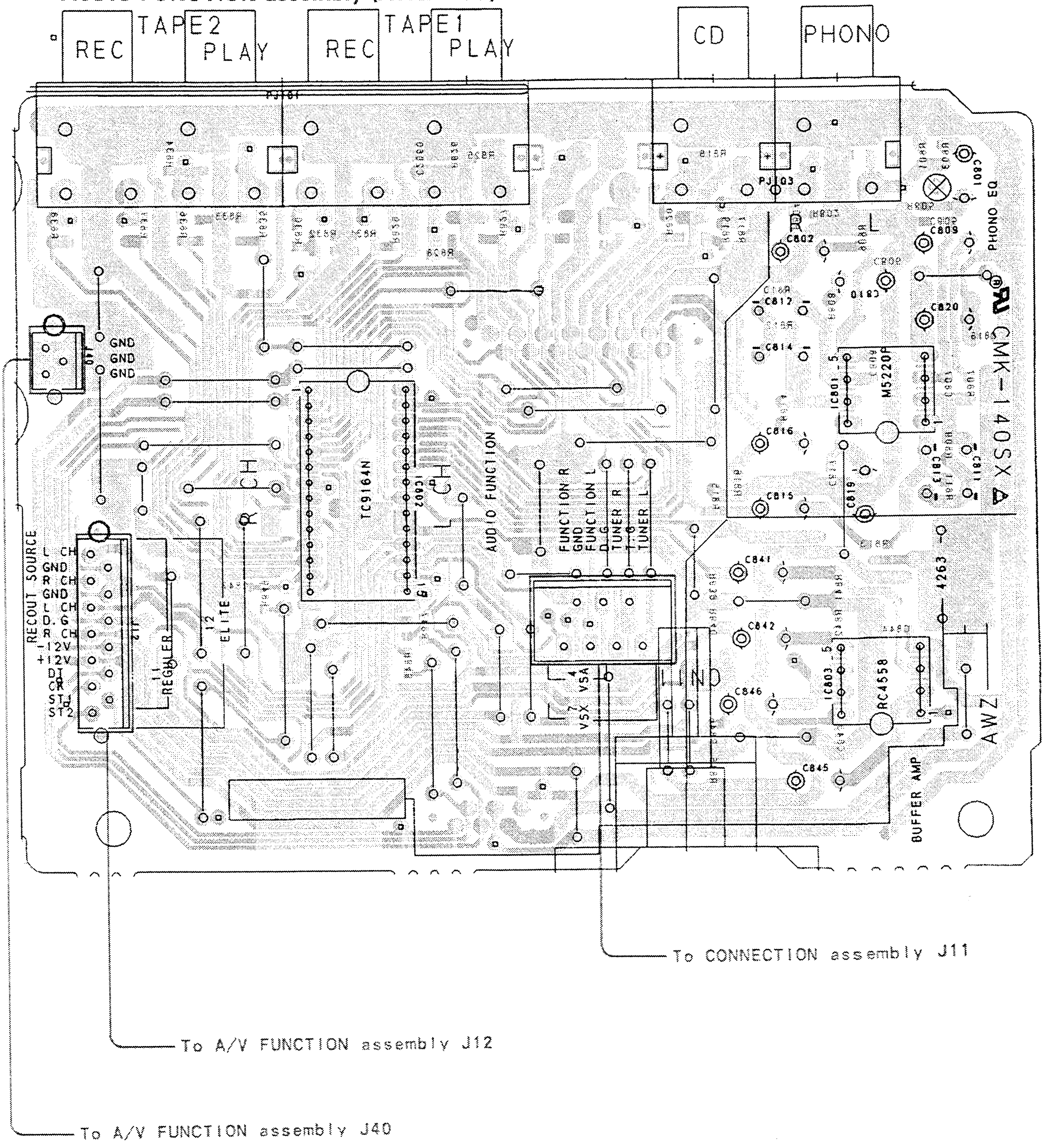

To A/V FUNCTION assembly J40
(⇨ SCH−4)
G G G
J40
③ ② ①
: AUDIO SIGNAL FRONT L
AUDIO FUNCTION assembly (AWZ4263)
PJ101
TAPE2
REC
PLAY
TAPE1
REC
PLAY
L ch
CD
PHONO
PJ103
PHONO
CD
R ch
TAPE1
PLAY
REC
TAPE2
PLAY
REC
R637 2.2k
R635 330
R633 470.0k
R629 2.2k
R631 470.0k
R627 330
R625 470.0k
R619 330
R617 470.0k
R603 330
C801 10/50
(PHONO)
R601 470.0k
R602 470.0k
R604 330
C802 10/50
R618 470.0k
R620 330
R626 470.0k
R628 330
R632 470.0k
C834 390p
R630 2.2K
R634 470.0k
R636 330
R638 2.2K
IC801 : PHONO EQ AMP
IC801 NJM2068 / M5220P
C817 0.01
C819 100/16
R805 56.0k
C805 220p
R807 680
C809 47/16
R809 390K
C811 8200p
R811 30.0k
C813 2400p
R806 56.0k
C806 220p
R808 680
C810 47/16
C812 8200p
C814 2400p
R810 390K
R812 30.0k
C818 0.01
C820 100/16
R813 470
C815 2.2/50
R815 220.0k
R814 470
C816 2.2/50
R816 220.0k
IC803 : BUFFER AMP.
C843 0.01
C841 2.2/50
R839 100.0k
R841 100.0k
IC803 NJM4558LD
1/2
C845 4.7/25
R845 220.0k
IC802 : FUNCTION SELECTOR
LD AUDIO SIGNAL
IC802 TC9164N
TAPE 1
TUNER
CD
PHONO
SOURCE
TAPE 2
FUNC
OUT
REC
TAPE 2
SOURCE
ST
CK
DT
11.9
11.9
0.6
R847 10.0k
R848 10.0k
C847 470
R849 1.0k
R840 100.0k
R842 100.0k
C842 2.2/50
C844 0.01
IC NJM4558LD
2/2
C846 4.7/25
R846 220.0k
(TUNER)
FRONT L
KPE7
CN11
L TUNER
G TUNER
R TUNER
D.G
L FUNC OUT
G
R FUNC OUT
To CONNECTION assembly
J11 (⇨ SCH−2)
J12
L
G
R
SOURCE
D.G
L
G
R
REC OUT
−12V
+12V
DT
CK
ST−1
ST−2
To A/V FUNCTION assembly J12
(⇨ SCH−4)
A
B
C
D
1
2
3
4
5
6

SCH−6

A

This PCB connection diagram is viewd from the parts mounted side.

AUDIO FUNCTION assembly (AWZ4263)


TAPE2
REC
PLAY
TAPE1
REC
PLAY
CD
PHONO
PJ101
PJ103
R
L
C802
C809
C810
C812
C814
C816
C815
C819
C820
C811
C813
PHONO EQ
IC801_5
M5220P
CMK-140SX
GND
GND
GND
J40
TC9164N
R CH
L CH
AUDIO FUNCTION
FUNCTION R
GND
FUNCTION L
D.G
TUNER R
TUNER L
RECOUT SOURCE
L CH
GND
R CH
GND
L CH
D.G
R CH
-12V
+12V
DI
CR
ST1
ST2
J12
REGULER
ELITE
VSX VSA
J11
C841
C842
C846
C845
IC803_5
RC4558
4263
AWZ
BUFFER AMP
To CONNECTION assembly J11
To A/V FUNCTION assembly J12
To A/V FUNCTION assembly J40

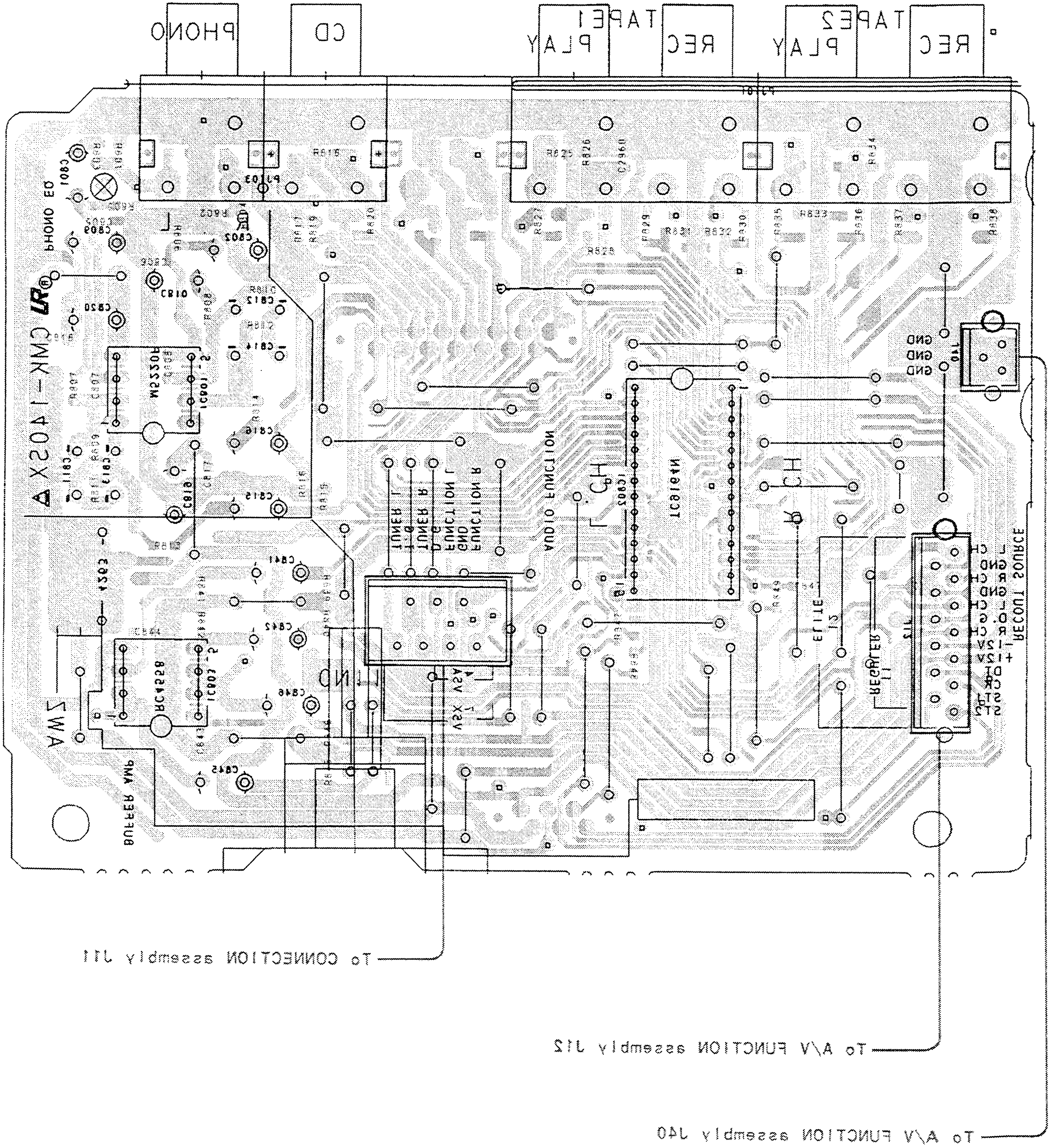
B

C

D

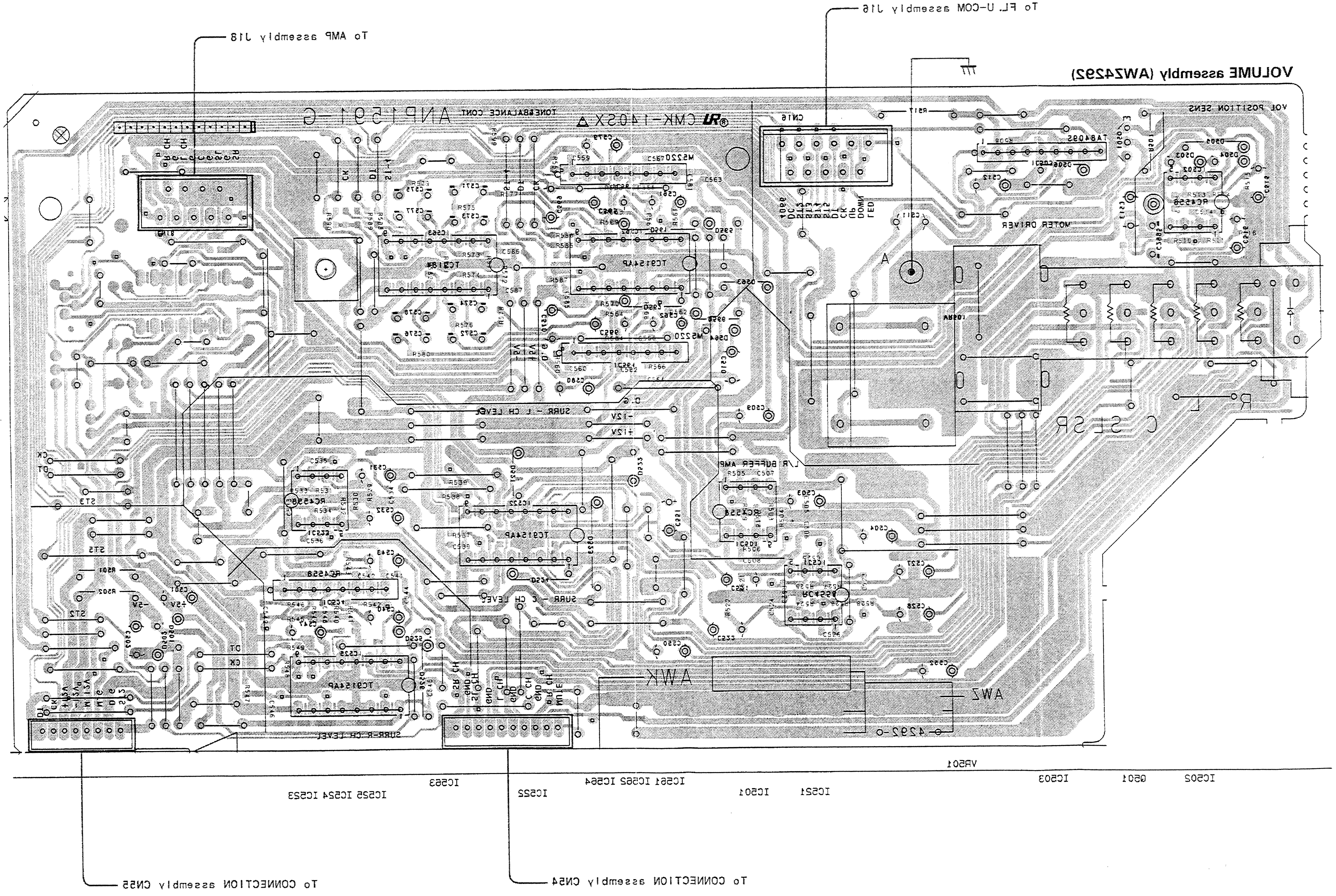
This PCB connection diagram is viwed from the foil side.

AUDIO FUNCTION assembly (AWZ4263)


PHONO
CD
TAPE1 PLAY
TAPE1 REC
TAPE2 PLAY
TAPE2 REC
PHONO EQ
CMK-1405XA
BUFFER AMP
ZWA
GND
GND
GND
J40
TUNER L
TUNER R
GND
FUNCTION L
GND
FUNCTION R
AUDIO FUNCTION
L CH
R CH
IC801
VSX
RECORD SOURCE
FILTER
REGULER
To CONNECTION assembly J11
To A/V FUNCTION assembly J12
To A/V FUNCTION assembly J40

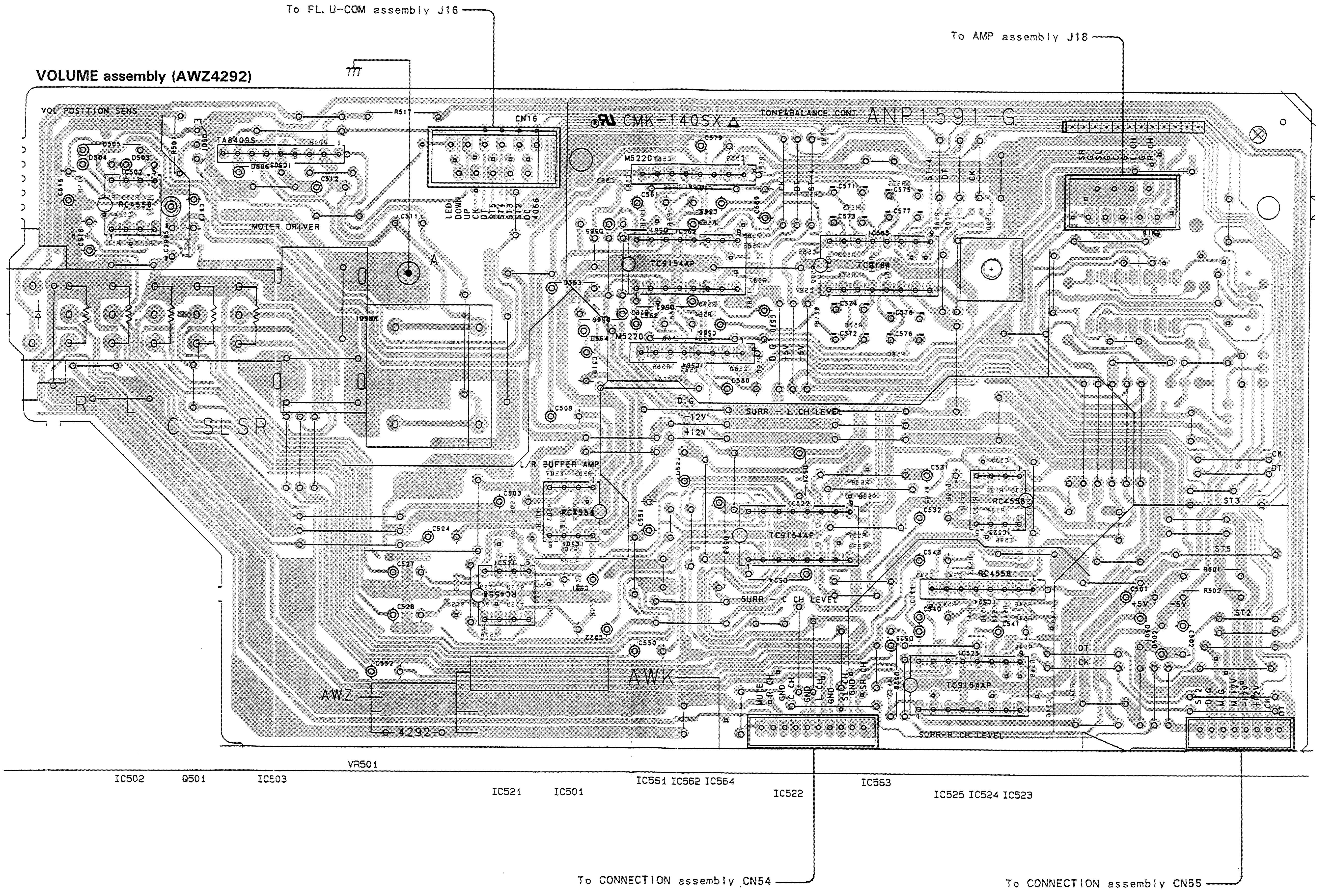
5.7 VOLUME ASSEMBLY

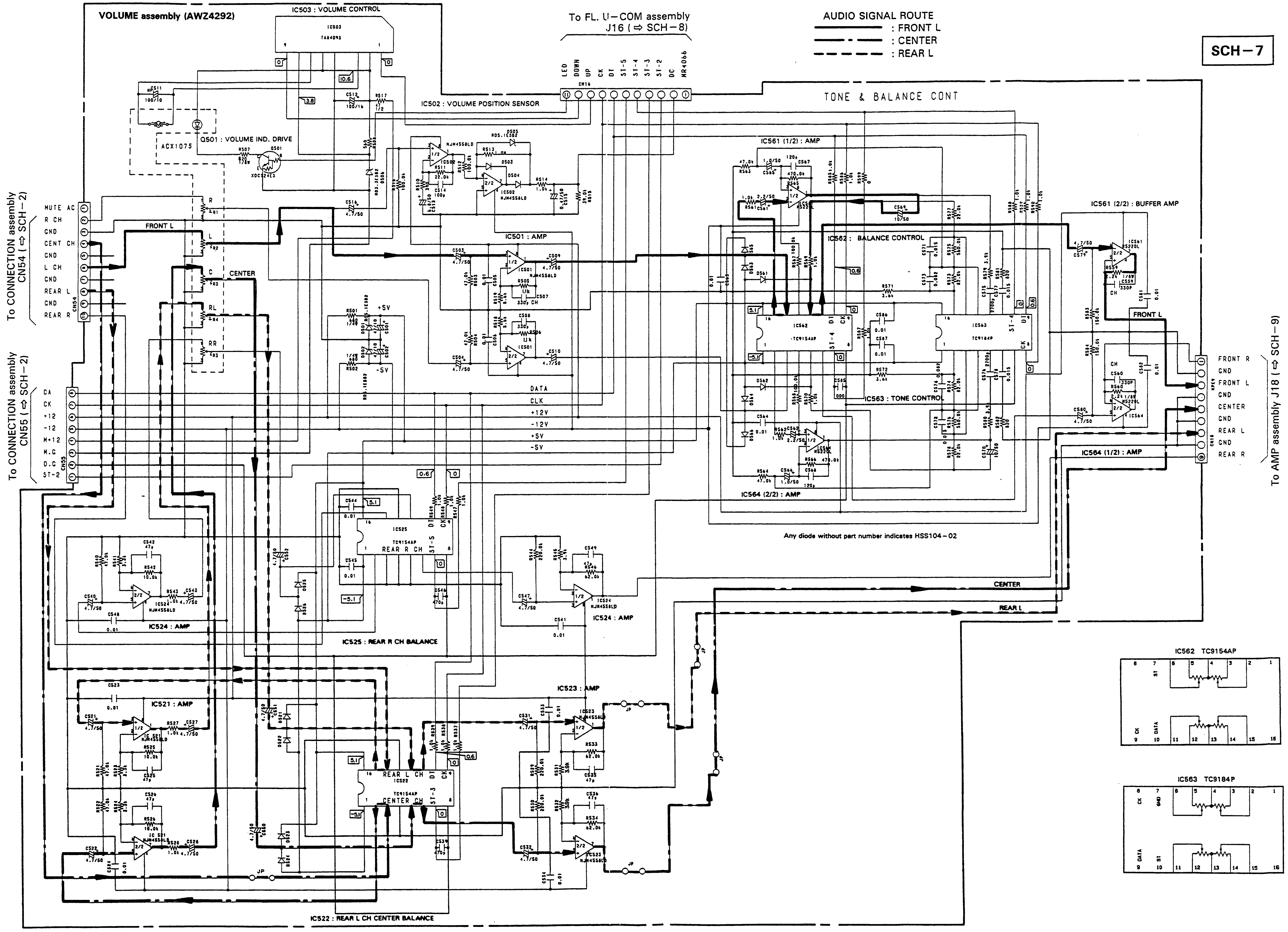
This PCB connection diagram is viwed from the foil side.


VOLUME assembly (AWZ4292)
To AMP assembly J18
To FL U-COM assembly J16
To CONNECTION assembly CN55
To CONNECTION assembly CN54
ANP1591-G
TONE&BALANCE CONT
CMK-1405X
CN16
VOL POSITION SENS
TA8409S
MOTER DRIVER
L/R BUFFER AMP
SURR - L CH LEVEL
SURR - C CH LEVEL
SURR-R CH LEVEL
TC9154AP
TC9184
M5220
RC4558
AWK
AWZ
4292
VR501
IC563
IC525 IC524 IC523
IC522
IC561 IC562 IC564
IC501
IC521
IC503
Q501
IC502
+12V
-12V
+5V
-5V
ST1
ST2
ST3
CK
DT

5.7 VOLUME ASSEMBLY

This PCB connection diagram is viewd from the parts mounted side.


To FL. U-COM assembly J16
To AMP assembly J18
VOLUME assembly (AWZ4292)
VOL POSITION SENS
TA8409S
MOTER DRIVER
CN16
LED
DOWN
UP
CK
DT
ST5
ST4
ST3
ST2
DC
4066
CMK-140SX
TONE&BALANCE CONT
ANP1591-G
M5220
TC9154AP
IC563
RC4558
A
R
L
C
SL
SR
L/R BUFFER AMP
D.G
-12V
+12V
SURR - L CH LEVEL
SURR - C CH LEVEL
SURR-R CH LEVEL
AWZ
4292
AWK
CK
DT
ST3
ST5
ST2
R501
R502
+5V
-5V
MUTE
R CH
GND
C CH
L CH
SL CH
SR CH
VR501
IC502
Q501
IC503
IC521
IC501
IC561 IC562 IC564
IC522
IC563
IC525 IC524 IC523
To CONNECTION assembly CN54
To CONNECTION assembly CN55


VOLUME assembly (AWZ4292)
IC503 : VOLUME CONTROL
IC502 : VOLUME POSITION SENSOR
Q501 : VOLUME IND. DRIVE
ACX1075
To FL. U-COM assembly J16 (⇨ SCH-8)
LED
DOWN
UP
CK
DT
ST-5
ST-4
ST-3
ST-2
DC
NR4066
CN16
AUDIO SIGNAL ROUTE
: FRONT L
: CENTER
: REAR L
SCH-7
TONE & BALANCE CONT
To CONNECTION assembly CN54 (⇨ SCH-2)
MUTE AC
R CH
GND
CENT CH
GND
L CH
GND
REAR L
GND
REAR R
CN54
To CONNECTION assembly CN55 (⇨ SCH-2)
DA
CK
+12
-12
M+12
M.C
D.C
ST-2
CN55
FRONT L
CENTER
IC501 : AMP
IC561 (1/2) : AMP
IC561 (2/2) : BUFFER AMP
IC562 : BALANCE CONTROL
IC563 : TONE CONTROL
IC564 (1/2) : AMP
IC564 (2/2) : AMP
DATA
CLK
+12V
-12V
+5V
-5V
+5V
-5V
IC524 : AMP
IC525 : REAR R CH BALANCE
IC521 : AMP
IC523 : AMP
IC522 : REAR L CH CENTER BALANCE
REAR L CH
CENTER CH
REAR R CH
TC9154AP
TC9184P
JP
CENTER
REAR L
FRONT L
Any diode without part number indicates HSS104-02
FRONT R
GND
FRONT L
GND
CENTER
GND
REAR L
GND
REAR R
CN18
To AMP assembly J18 (⇨ SCH-9)
IC562 TC9154AP
IC563 TC9184P
ST
CK
DATA
GND

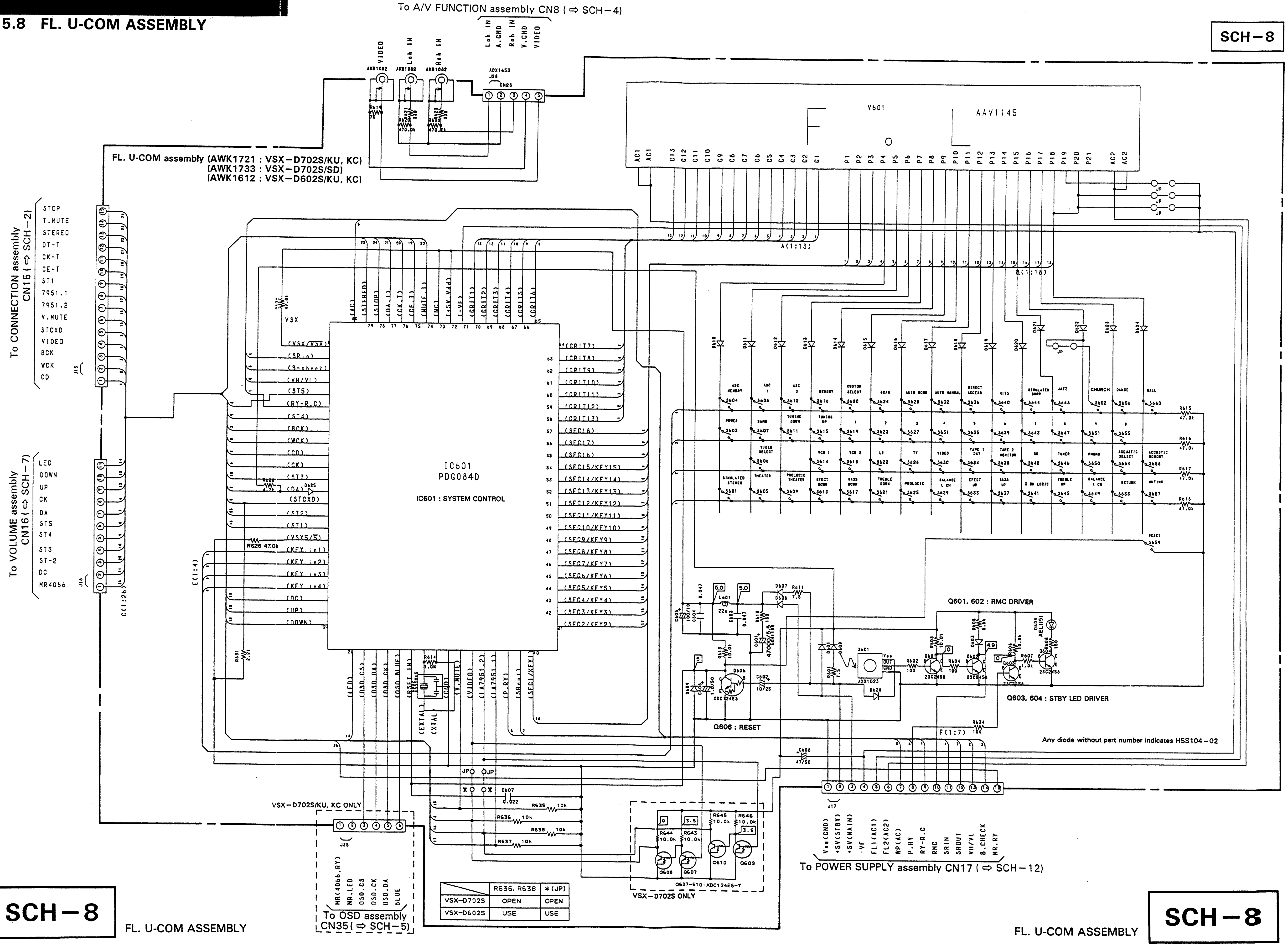
SCH-7

VOLUME ASSEMBLY

SCH-7

VOLUME ASSEMBLY

5.8 FL. U-COM ASSEMBLY


To A/V FUNCTION assembly CN8 (⇨ SCH−4)
L ch IN
A.GND
R ch IN
V.GND
VIDEO
AKB1082
ADX1653
J28
CN28
V601
AAV1145
FL. U-COM assembly (AWK1721 : VSX−D702S/KU, KC)
(AWK1733 : VSX−D702S/SD)
(AWK1612 : VSX−D602S/KU, KC)
To CONNECTION assembly CN15 (⇨ SCH−2)
STOP
T.MUTE
STEREO
DT-T
CK-T
CE-T
ST1
7951.1
7951.2
V.MUTE
STCXD
VIDEO
BCK
WCK
CD
J15
To VOLUME assembly CN16 (⇨ SCH−7)
LED
DOWN
UP
CK
DA
ST5
ST4
ST3
ST-2
DC
MR4066
J16
C(1:26)
E(1:4)
A(1:13)
B(1:18)
IC601
PDG084D
IC601 : SYSTEM CONTROL
VSX
R626 47.0k
R631 2.2k
JP
C607 0.022
R635 10k
R636 10k
R638 10k
R637 10k
VSX−D702S/KU, KC ONLY
J35
MR(4066.RY)
MR.LED
OSD.CS
OSD.CK
OSD.DA
BLUE
To OSD assembly CN35 (⇨ SCH−5)
R645 10.0k
R646 10.0k
R644 10.0k
R643 10.0k
Q608
Q607
Q610
Q609
Q607−610 : XDC124ES−T
VSX−D702S ONLY
Q601, 602 : RMC DRIVER
Q603, 604 : STBY LED DRIVER
Q606 : RESET
X601
AXX1023
D626
F(1:7)
R634 10k
C608 47/50
Any diode without part number indicates HSS104−02
J17
Vss(GND)
+5V(STBY)
+5V(MAIN)
−VF
FL1(AC1)
FL2(AC2)
WP(AC)
P.RY
RY-R.C
RMC
SRIN
SROUT
VH/VL
B.CHECK
MR.RY
To POWER SUPPLY assembly CN17 (⇨ SCH−12)

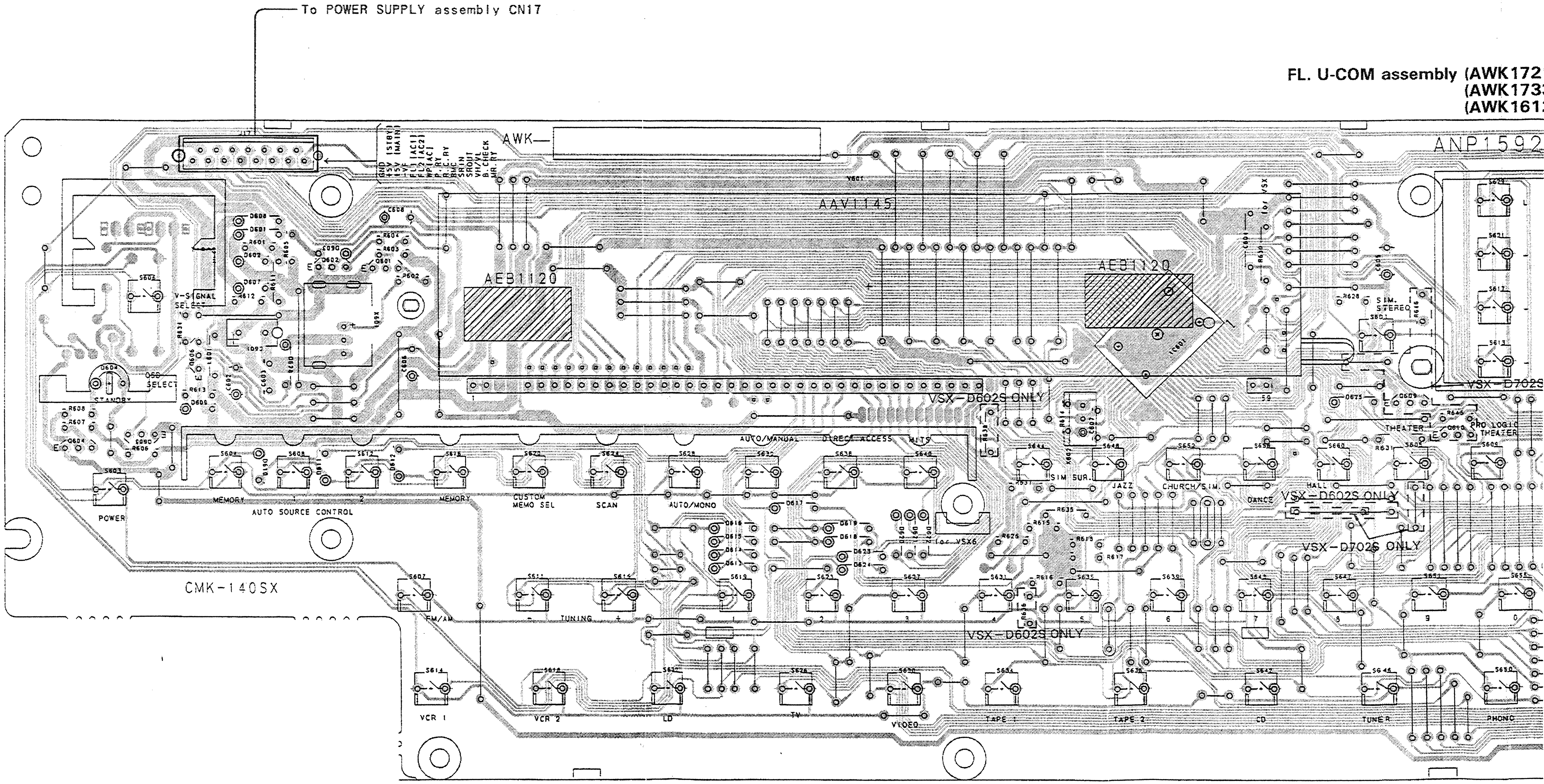
	R636. R638	*(JP)
VSX−D702S	OPEN	OPEN
VSX−D602S	USE	USE

SCH−8 FL. U-COM ASSEMBLY

FL. U-COM ASSEMBLY **SCH−8**

This PCB connection diagram is viewd from the parts mounted side.

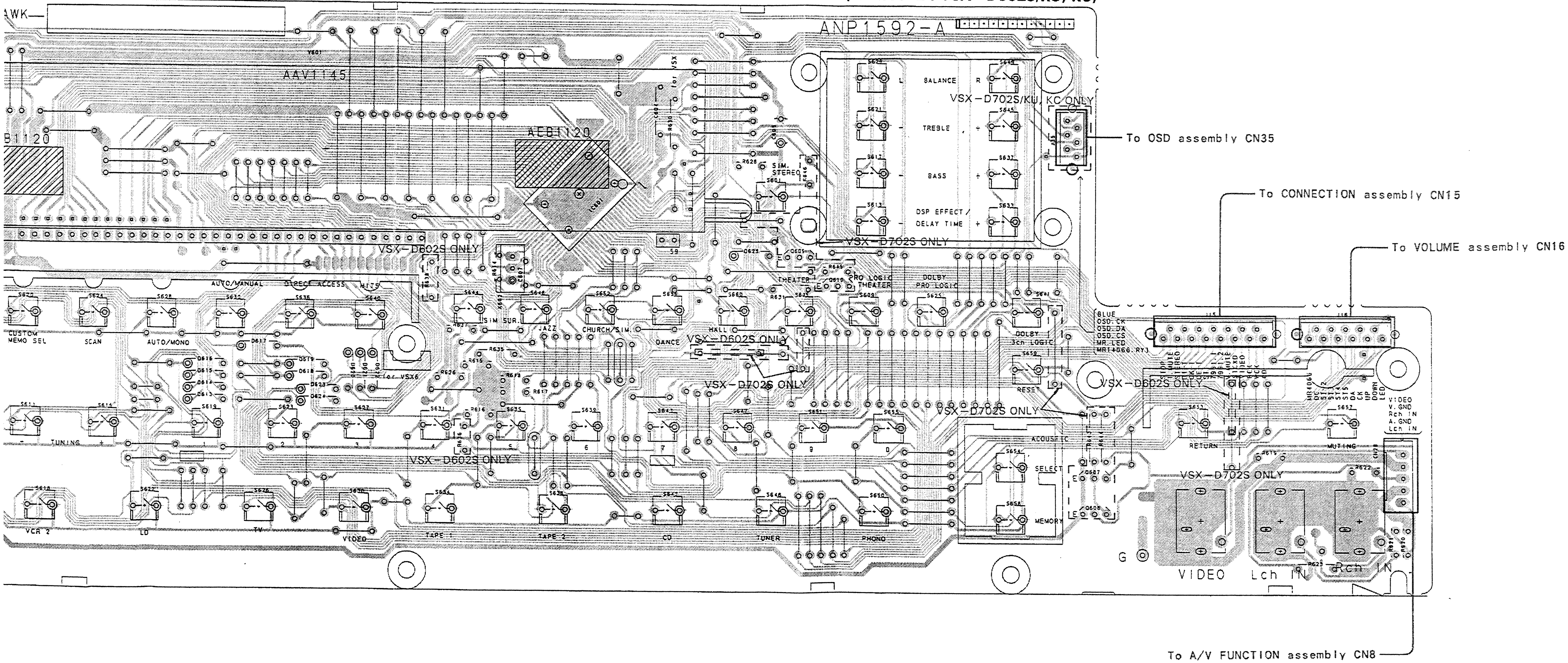
FL. U-COM assembly (AWK172
(AWK173
(AWK161


To POWER SUPPLY assembly CN17
AWK—
ANP1592
AAV1145
AEB1120
AEB1120
CMK-140SX
V-SIGNAL SELECT
OSD SELECT
STANDBY
POWER
MEMORY
AUTO SOURCE CONTROL
MEMORY
CUSTOM MEMO SEL
SCAN
AUTO/MONO
AUTO/MANUAL
DIRECT ACCESS
HITS
VSX-D602S ONLY
VSX-D702S
for VSX6
SIM SUR
JAZZ
CHURCH/SIM.
DANCE
HALL
THEATER
PRO LOGIC THEATER
SIM. STEREO
VSX-D602S ONLY
VSX-D702S ONLY
FM/AM
TUNING
VSX-D602S ONLY
VCR 1
VCR 2
LD
TV
VIDEO
TAPE 1
TAPE 2
CD
TUNER
PHONO
for VSX

This PCB connection diagram is viewd from the parts mounted side.

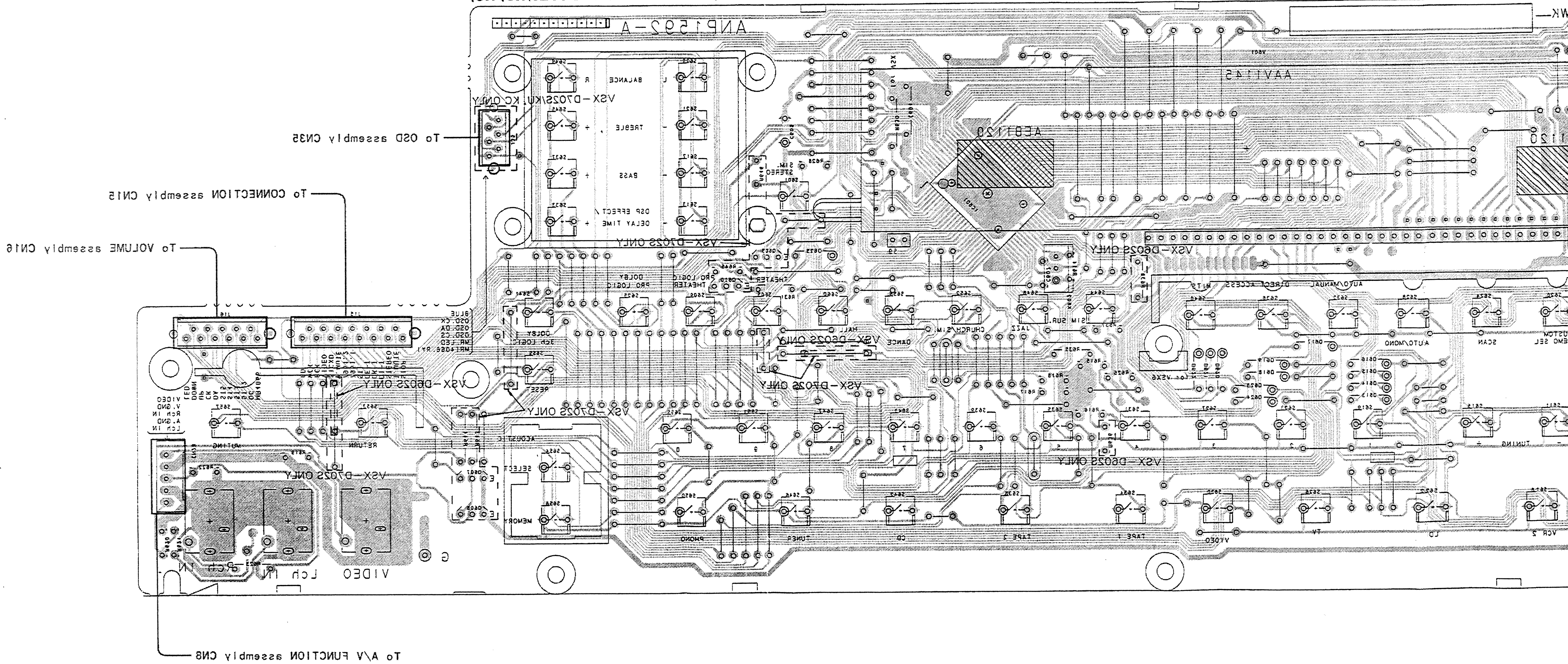
CN17

FL. U-COM assembly (AWK1721 : VSX−D702S/KU, KC)
(AWK1733 : VSX−D702S/SD)
(AWK1612 : VSX−D602S/KU, KC)


AWK
ANP1592-A
AAV1145
B1120
AEB1120
Y601
SIM. STEREO
S601
BALANCE
L
R
VSX−D702S/KU, KC ONLY
TREBLE
BASS
DSP EFFECT / DELAY TIME
To OSD assembly CN35
To CONNECTION assembly CN15
To VOLUME assembly CN16
VSX−D702S ONLY
VSX−D602S ONLY
AUTO/MANUAL
DIRECT ACCESS
MITS
THEATER
PRO LOGIC THEATER
DOLBY PRO LOGIC
CUSTOM MEMO SEL
SCAN
AUTO/MONO
SIM. SUR.
JAZZ
CHURCH/SIM
DANCE
HALL
DOLBY 3ch LOGIC
RESET
BLUE
OSD.CK
OSD.DA
OSD.CS
MR.LED
MR14066.RY3
TUNING
RETURN
MUTING
ACOUSTIC
SELECT
MEMORY
VIDEO
V.GND
Rch IN
A.GND
Lch IN
VCR 2
LD
TV
VIDEO
TAPE 1
TAPE 2
CD
TUNER
PHONO
G
VIDEO
Lch IN
Rch IN
To A/V FUNCTION assembly CN8

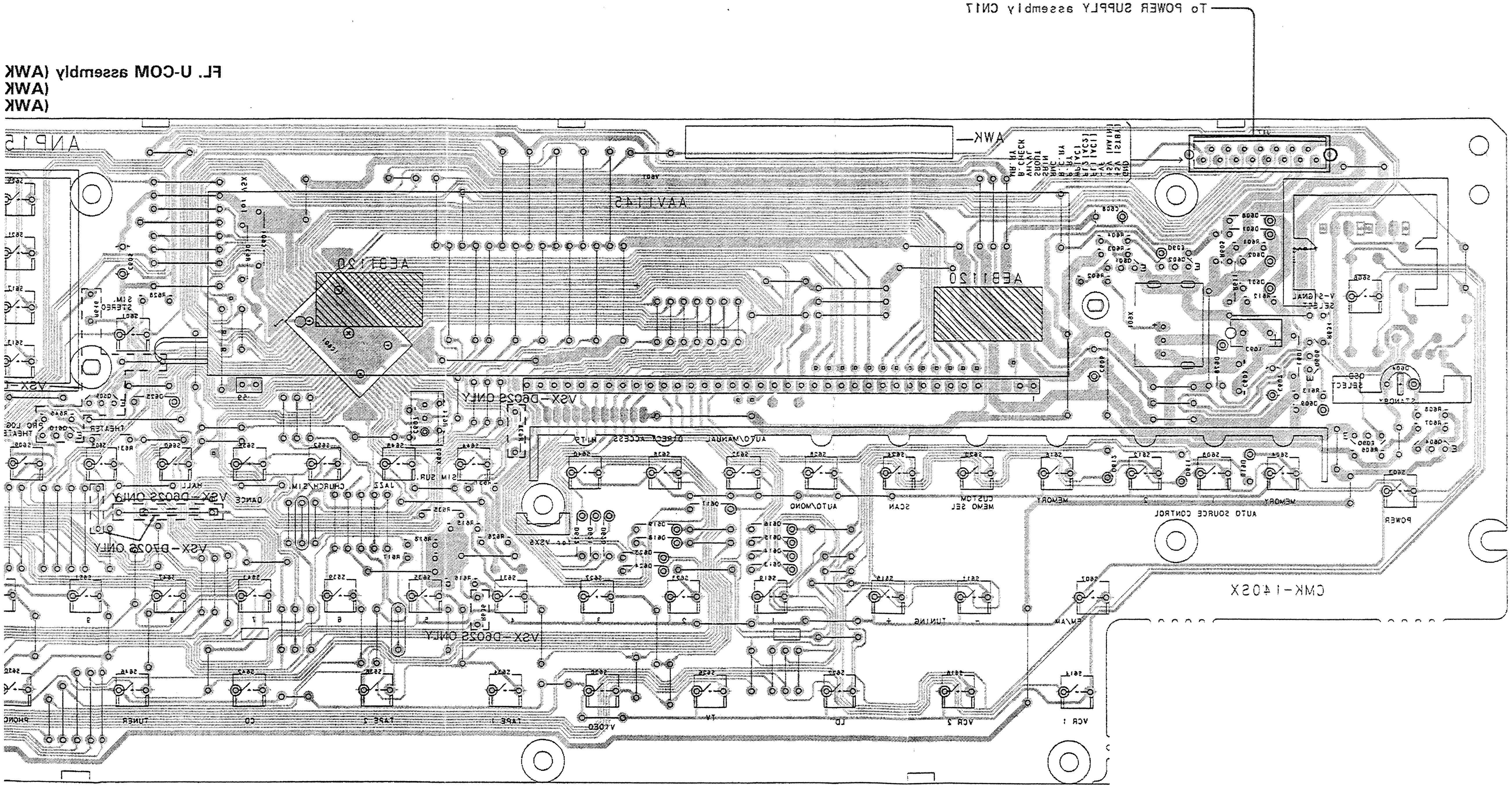
This PCB connection diagram is viwed from the foil side.

FL. U-COM assembly (AWK1721 : VSX-D702S/KU, KC)
(AWK1733 : VSX-D702S/SD)
(AWK1612 : VSX-D602S/KU, KC)


ANP1592-A
AAV1145
AEB1120
To OSD assembly CN35
To CONNECTION assembly CN15
To VOLUME assembly CN16
To A/V FUNCTION assembly CN8
VSX-D702S/KU, KC ONLY
VSX-D702S ONLY
VSX-D602S ONLY
BALANCE
TREBLE
BASS
DSP EFFECT / DELAY TIME
DOLBY PRO LOGIC
PRO LOGIC THEATER
THEATER
HALL
CHURCH/SIM.
JAZZ
SIM SUR
DANCE
SIM. STEREO
AUTO/MANUAL
DIRECT ACCESS
MUTING
RETURN
ACOUSTIC
SELECT
MEMORY
PHONO
TUNER
CD
TAPE 1
TAPE 2
VIDEO
TV
LD
VCR 2
AUTO/MONO
SCAN
TUNING
CUSTOM MEMO SEL
VIDEO
V.GND
Rch IN
A.GND
Lch IN
Rch IN
Lch IN
VIDEO
J16
J15

This PCB connection diagram is viwed from the foil side.

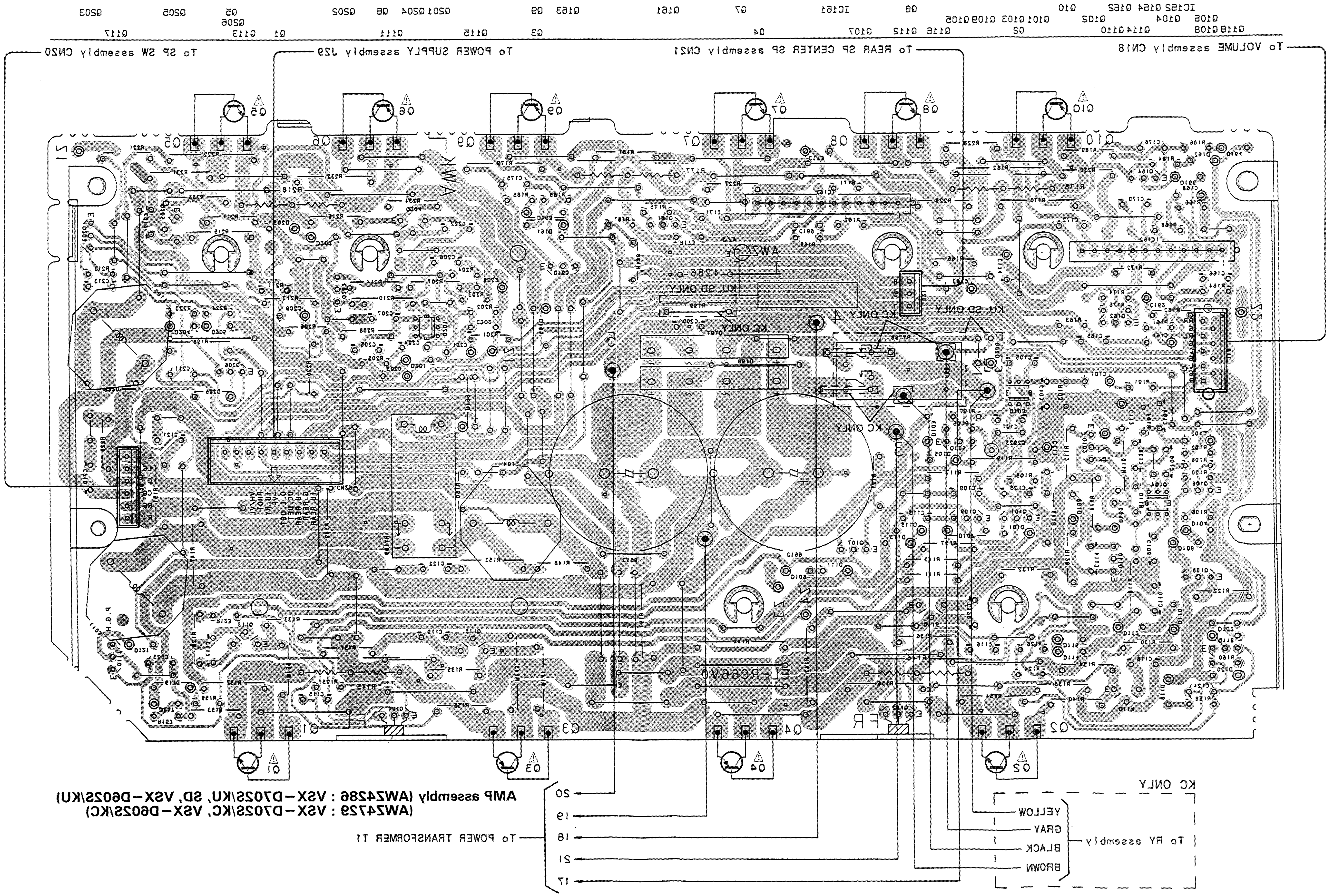
FL. U-COM assembly (AWK
(AWK)
(AWK)



To POWER SUPPLY assembly CN11
AWK
AEB1120
VSX-D602S ONLY
VSX-D702S ONLY
POWER
MEMORY
AUTO SOURCE CONTROL
SCAN
AUTO/MONO
TUNING
PHONO
TUNER
CD
TAPE 2
TAPE 1
VIDEO
TV
LD
VCR 2
VCR 1

This PCB connection diagram is viwed from the foil side.

5.9 AMP ASSEMBLY

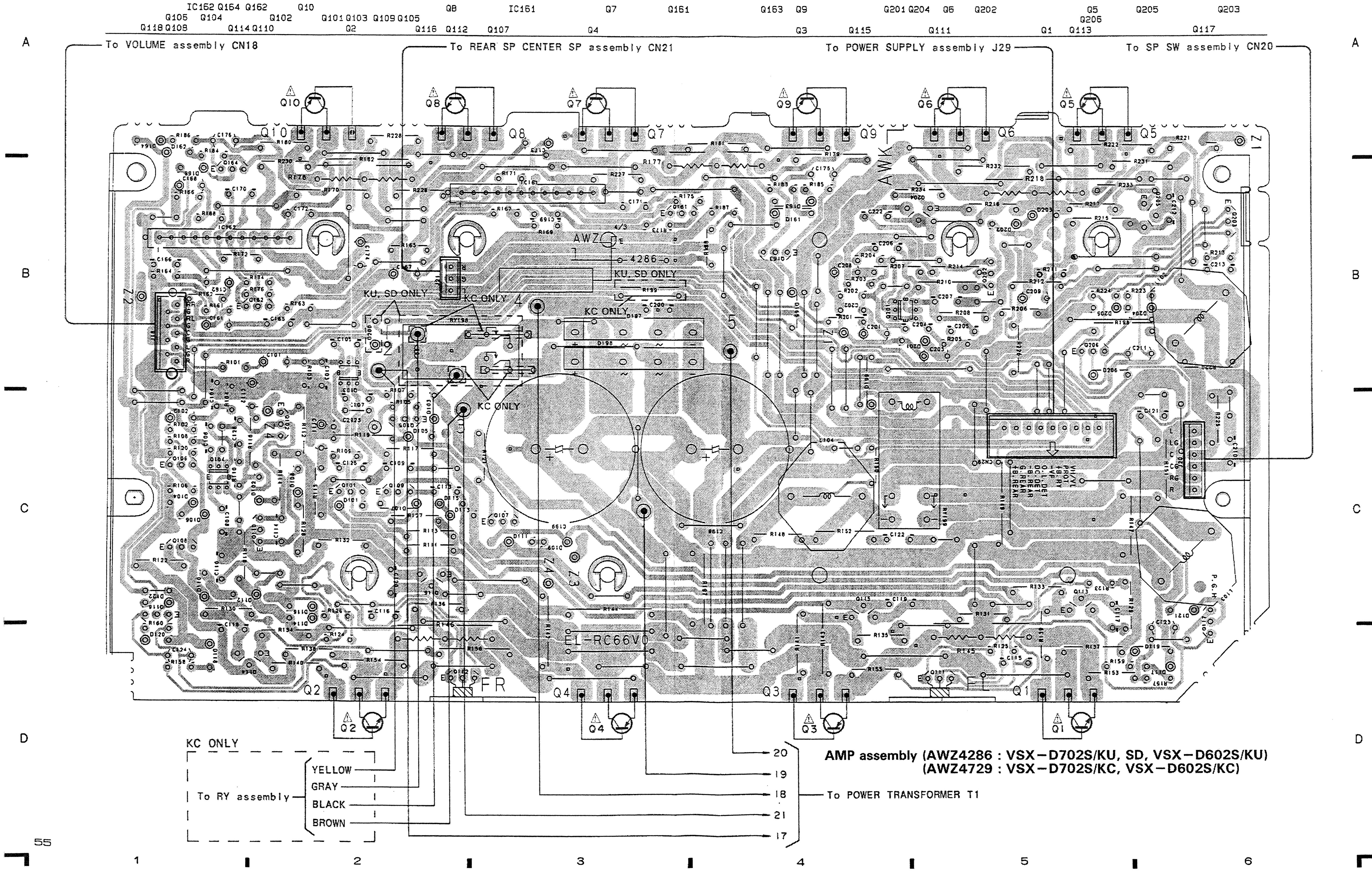

6
5
4
3
2
1
A
B
C
D
To SP SW assembly CN20
To POWER SUPPLY assembly J29
To REAR SP CENTER SP assembly CN21
To VOLUME assembly CN18
Q1
Q2
Q3
Q4
Q5
Q6
Q7
Q8
Q9
Q10
AWZ4286
KU, SD ONLY
KC ONLY
To POWER TRANSFORMER T1
20
19
18
21
17
KC ONLY
YELLOW
GRAY
BLACK
BROWN
To RY assembly

AMP assembly (AWZ4286 : VSX-D702S/KU, SD, VSX-D602S/KU)
(AWZ4729 : VSX-D702S/KC, VSX-D602S/KC)

5.9 AMP ASSEMBLY

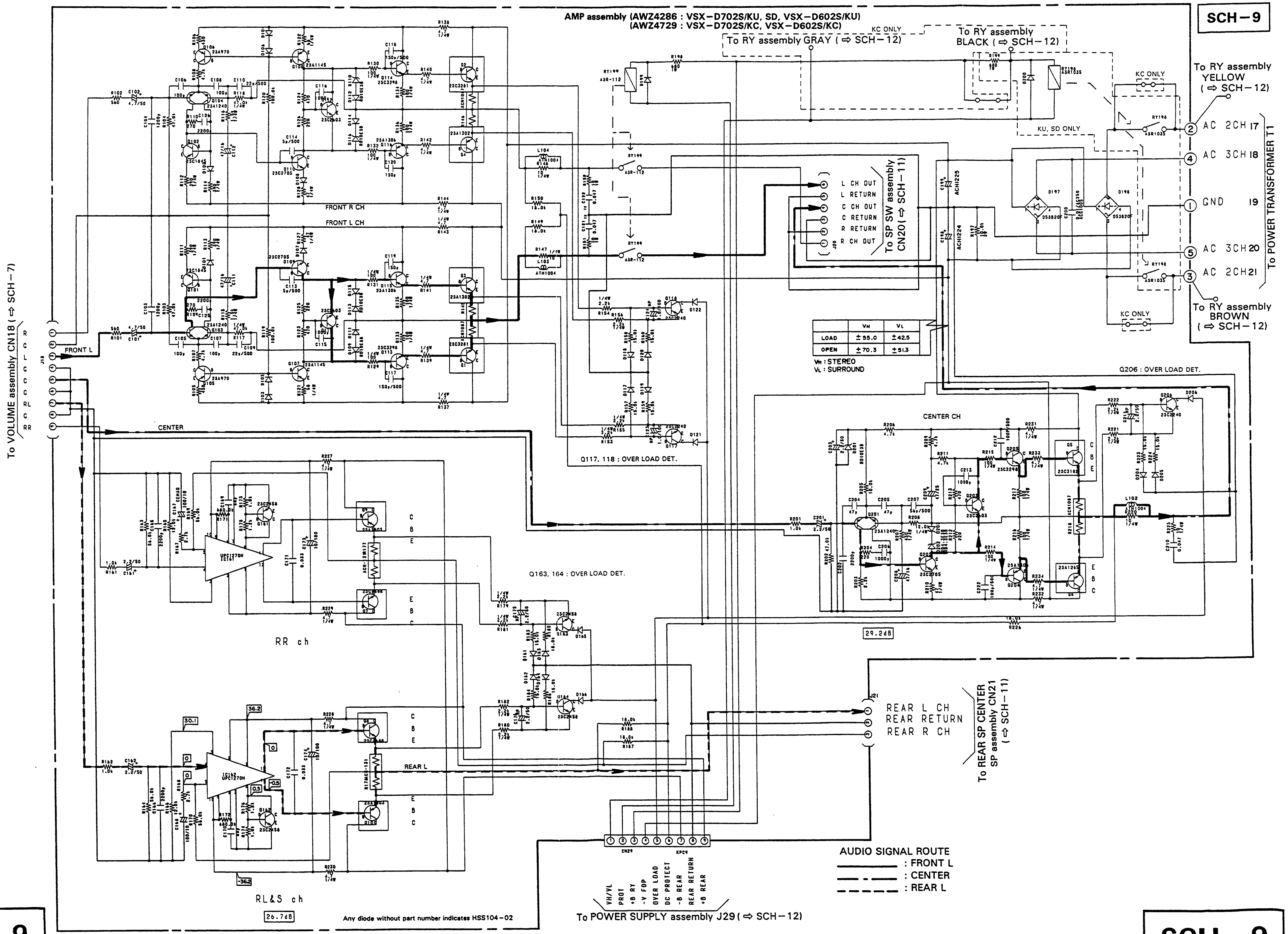
This PCB connection diagram is viewd from the parts mounted side.

PCB-8


1
2
3
4
5
6
A
B
C
D
IC152 Q164 Q162 Q10
Q105 Q104 Q102 Q101 Q103 Q109 Q105
Q118 Q108 Q114 Q110 Q2 Q116 Q112 Q107
Q8 IC161 Q7 Q161 Q163 Q9 Q201 Q204 Q6 Q202 Q5 Q205 Q203
Q4 Q3 Q115 Q111 Q1 Q113 Q206 Q117
To VOLUME assembly CN18
To REAR SP CENTER SP assembly CN21
To POWER SUPPLY assembly J29
To SP SW assembly CN20
Q10
Q8
Q7
Q9
Q6
Q5
Q2
Q4
Q3
Q1
AWZ
4286
AWK
KU, SD ONLY
KC ONLY
EL-RC66V0
FR
KC ONLY
To RY assembly
YELLOW
GRAY
BLACK
BROWN
20
19
18
21
17
To POWER TRANSFORMER T1

AMP assembly (AWZ4286 : VSX−D702S/KU, SD, VSX−D602S/KU)
(AWZ4729 : VSX−D702S/KC, VSX−D602S/KC)

SCH-9


AMP assembly (AWZ4286 : VSX-D702S/KU, SD, VSX-D602S/KU)
(AWZ4729 : VSX-D702S/KC, VSX-D602S/KC)
KC ONLY
To RY assembly GRAY (⇨ SCH-12)
To RY assembly BLACK (⇨ SCH-12)
To RY assembly YELLOW (⇨ SCH-12)
KC ONLY
KU, SD ONLY
② AC 2CH 17
④ AC 3CH 18
① GND 19
⑤ AC 3CH 20
③ AC 2CH 21
To RY assembly BROWN (⇨ SCH-12)
To POWER TRANSFORMER T1
KC ONLY
L CH OUT
L RETURN
C CH OUT
C RETURN
R RETURN
R CH OUT
To SP SW assembly CN20 (⇨ SCH-11)
FRONT R CH
FRONT L CH
FRONT L
CENTER
To VOLUME assembly CN18 (⇨ SCH-7)
R
C
L
C
C
C
RL
C
RR
Q117, 118 : OVER LOAD DET.
Q206 : OVER LOAD DET.
CENTER CH
Q163, 164 : OVER LOAD DET.
RR ch
RL&S ch
REAR L
29.2dB
26.7dB
30.1
36.2
-36.2
REAR L CH
REAR RETURN
REAR R CH
To REAR SP CENTER SP assembly CN21 (⇨ SCH-11)
VH/VL
PROT
+B RY
-V FDP
OVER LOAD
DC PROTECT
-B REAR
REAR RETURN
+B REAR
To POWER SUPPLY assembly J29 (⇨ SCH-12)
Any diode without part number indicates HSS104-02
AUDIO SIGNAL ROUTE
: FRONT L
: CENTER
: REAR L
VH : STEREO
VL : SURROUND

	VH	VL
LOAD	±55.0	±42.5
OPEN	±70.3	±51.3

VH : STEREO
VL : SURROUND

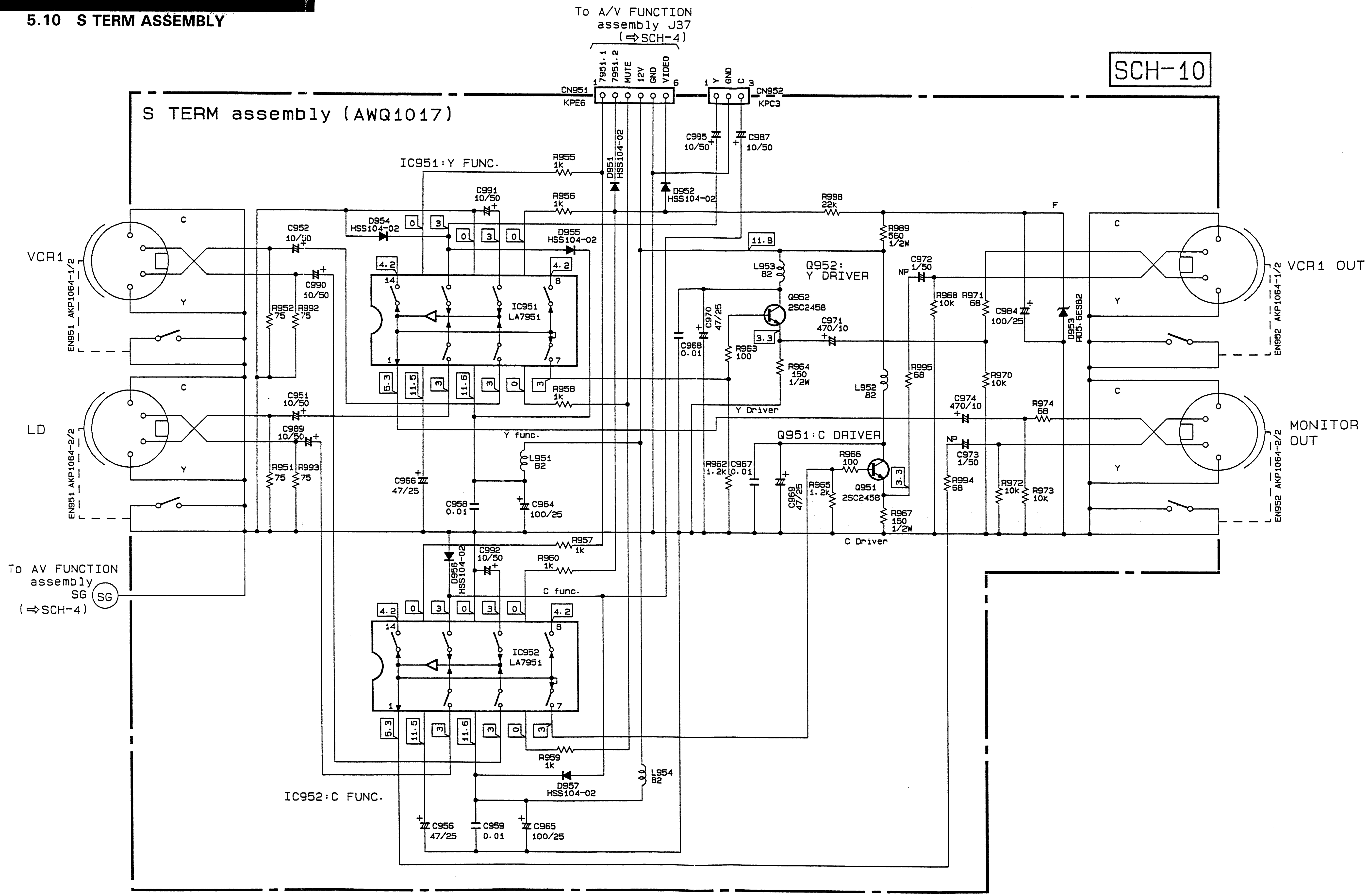
SCH-9

AMP ASSEMBLY

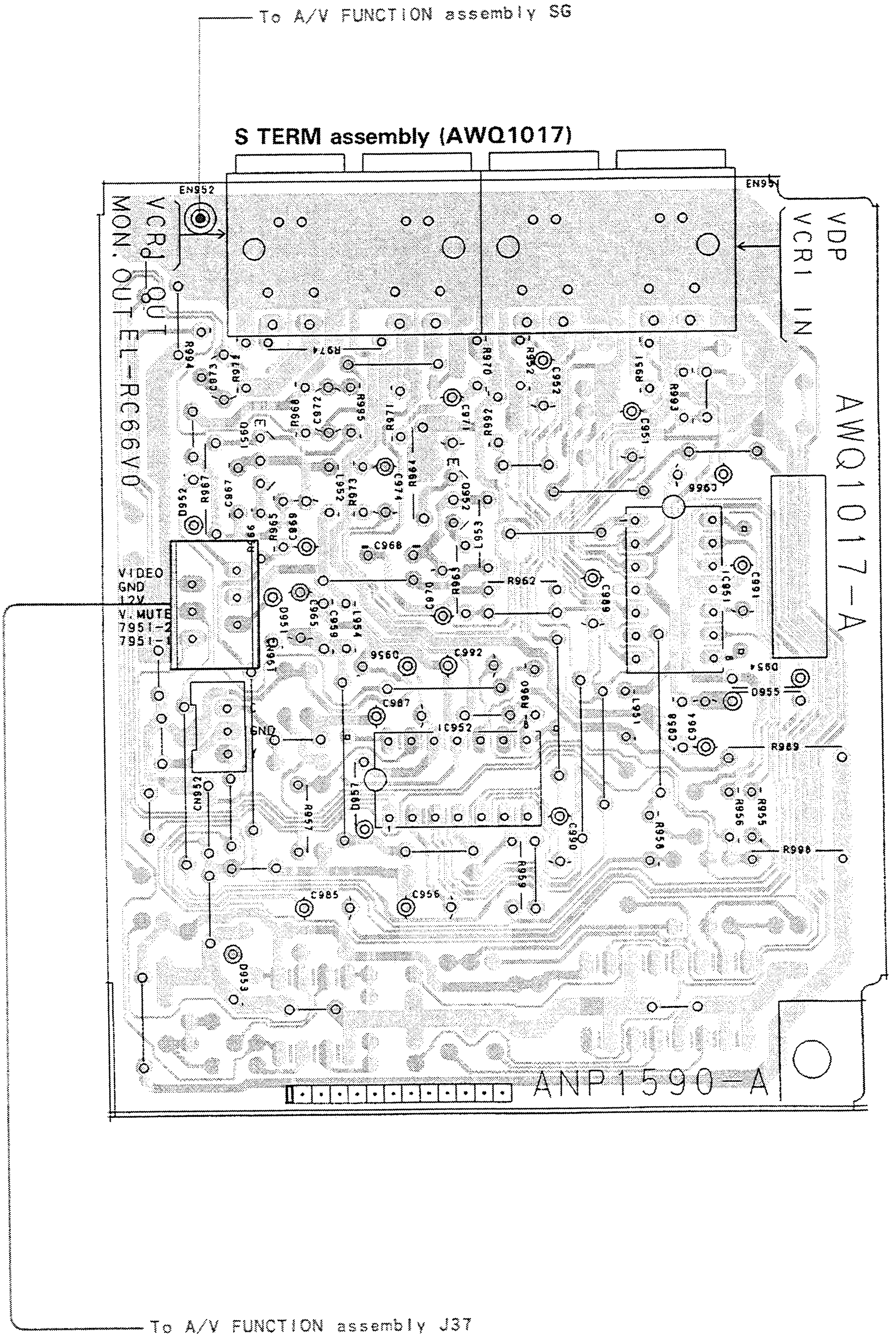
SCH-9

AMP ASSEMBLY

5.10 S TERM ASSEMBLY


To A/V FUNCTION
assembly J37
(⇨SCH-4)
SCH-10
S TERM assembly (AWQ1017)
CN951
KPE6
7951.1
7951.2
MUTE
12V
GND
VIDEO
1 Y GND C 3
CN952
KPC3
C985 10/50
C987 10/50
IC951:Y FUNC.
R955 1k
D951 HSS104-02
D952 HSS104-02
C991 10/50
R956 1k
R998 22k
F
D954 HSS104-02
D955 HSS104-02
C952 10/50
C990 10/50
IC951 LA7951
R989 560 1/2W
L953 82
Q952: Y DRIVER
Q952 2SC2458
C970 47/25
C968 0.01
R963 100
R964 150 1/2W
C971 470/10
C972 1/50
NP
R968 10k
R971 68
C984 100/25
D953 RD5.6ESB2
R995 68
R970 10k
L952 82
C974 470/10
R974 68
VCR1
VCR1 OUT
EN951 AKP1064-1/2
EN952 AKP1064-1/2
R952 75
R992 75
R958 1k
LD
EN951 AKP1064-2/2
C951 10/50
C989 10/50
R951 75
R993 75
Y func.
L951 82
C966 47/25
C958 0.01
C964 100/25
Y Driver
Q951:C DRIVER
R966 100
Q951 2SC2458
R962 1.2k
C967 0.01
C969 47/25
R965 1.2k
R967 150 1/2W
C973 1/50
R994 68
R972 10k
R973 10k
C Driver
MONITOR OUT
EN952 AKP1064-2/2
To AV FUNCTION
assembly
SG
(⇨SCH-4)
R957 1k
D956 HSS104-02
C992 10/50
R960 1k
C func.
IC952 LA7951
R959 1k
D957 HSS104-02
L954 82
IC952:C FUNC.
C956 47/25
C959 0.01
C965 100/25
4.2
0
3
11.8
3.3
5.3
11.5
11.6
14
8
1
7
C
Y

This PCB connection diagram is viewd from the parts mounted side.

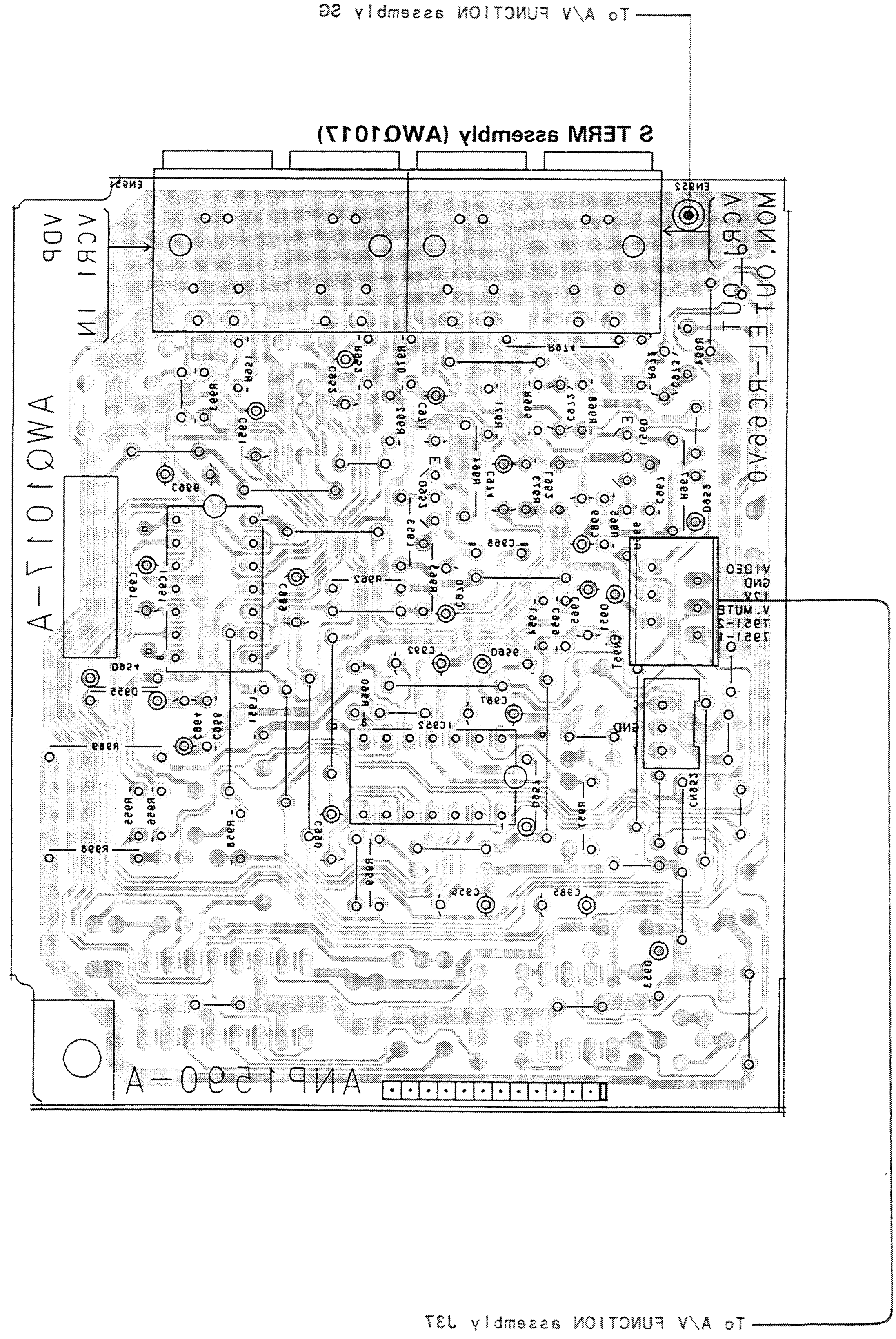


S TERM assembly (AWQ1017)

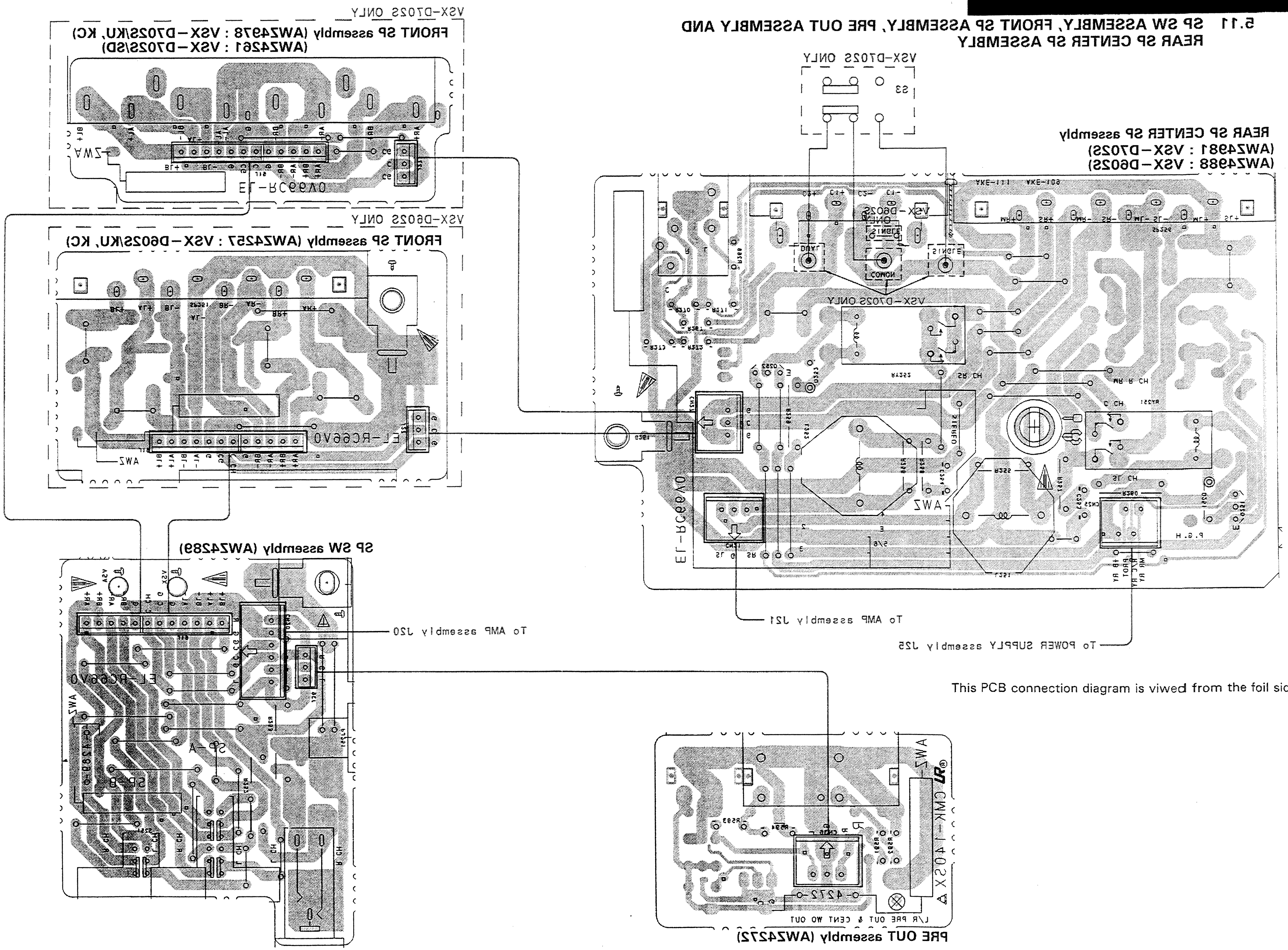
To A/V FUNCTION assembly SG
EN952
EN951
VCR1 OUT
MON. OUT
EL-RC66V0
VDP
VCR1 IN
AWQ1017-A
ANP1590-A
VIDEO
GND
12V
V.MUTE
7951-2
7951-1
GND
CN952
IC951
IC952
R974
R970
R952
R951
R993
R994
R912
R968
R995
R971
R992
R964
R967
R965
R966
R963
R962
R989
R955
R956
R958
R998
R957
R959
R960
C973
C972
C971
C952
C951
C966
C967
C969
C974
C968
C970
C989
C991
C965
C959
C956
C992
C987
C990
C985
C958
C964
D952
D951
D957
D953
D954
D955
Q951
Q952
Q953
Q954
L951
L952
L953
L954
L961
To A/V FUNCTION assembly J37

This PCB connection diagram is viwed from the foil side.

S TERM assembly (AWQ1017)

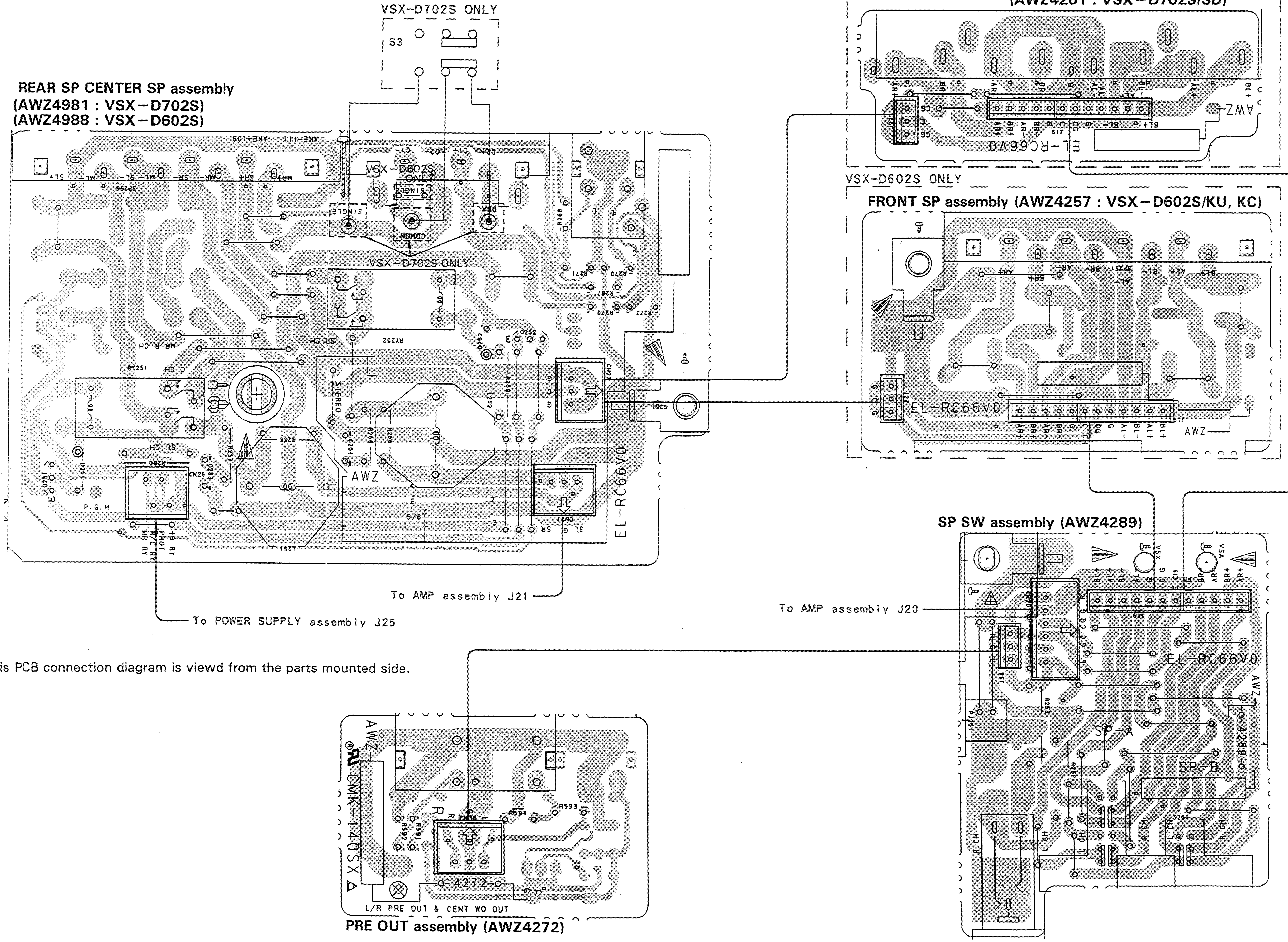

To A/V FUNCTION assembly SG
To A/V FUNCTION assembly J37
VDP
VCR1 IN
VCR1 OUT
MON. OUT
EN951
EN952
AWQ1017-A
ANP1590-A
VIDEO
GND
12V
V.MUTE
7951-2
7951-1
IC951
IC952
CN952
A
B
C
D

5.11 SP SW ASSEMBLY, FRONT SP ASSEMBLY, PRE OUT ASSEMBLY AND REAR SP CENTER SP ASSEMBLY

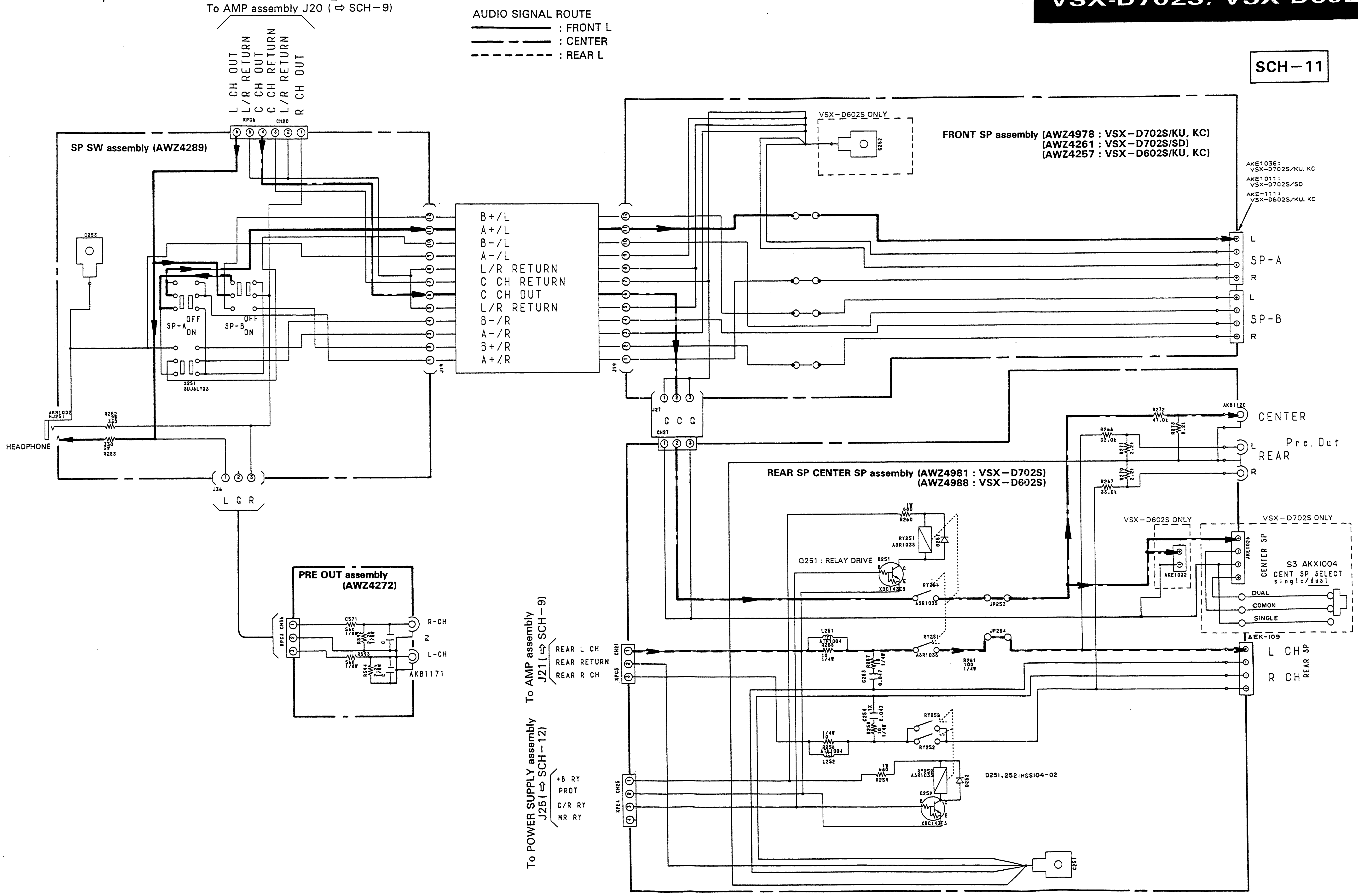

VSX-D702S ONLY
FRONT SP assembly (AWZ4978 : VSX-D702S/KU, KC)
(AWZ4261 : VSX-D702S/SD)
VSX-D602S ONLY
FRONT SP assembly (AWZ4257 : VSX-D602S/KU, KC)
SP SW assembly (AWZ4289)
To AMP assembly J20
VSX-D702S ONLY
S3
REAR SP CENTER SP assembly
(AWZ4981 : VSX-D702S)
(AWZ4988 : VSX-D602S)
To AMP assembly J21
To POWER SUPPLY assembly J25
PRE OUT assembly (AWZ4272)

This PCB connection diagram is viwed from the foil side.

5.11 SP SW ASSEMBLY, FRONT SP ASSEMBLY, PRE OUT ASSEMBLY AND REAR SP CENTER SP ASSEMBLY


VSX-D702S ONLY
S3
REAR SP CENTER SP assembly
(AWZ4981 : VSX-D702S)
(AWZ4988 : VSX-D602S)
VSX-D602S ONLY
SINGLE
COMON
DUAL
VSX-D702S ONLY
RY251
RY252
C CH
SL CH
SR CH
MR R CH
STEREO
AWZ
P.G.H
CN25
CN21
CN27
EL-RC66V0
SL G SR
To AMP assembly J21
To POWER SUPPLY assembly J25
VSX-D702S ONLY
FRONT SP assembly (AWZ4978 : VSX-D702S/KU, KC)
(AWZ4261 : VSX-D702S/SD)
J19
EL-RC66V0
AWZ
VSX-D602S ONLY
FRONT SP assembly (AWZ4257 : VSX-D602S/KU, KC)
EL-RC66V0
AWZ
SP SW assembly (AWZ4289)
To AMP assembly J20
EL-RC66V0
AWZ-4289-0
SP-A
SP-B
AWZ-
CMK-140SX
4272
L/R PRE OUT & CENT WO OUT
PRE OUT assembly (AWZ4272)

This PCB connection diagram is viewd from the parts mounted side.


To AMP assembly J20 (⇨ SCH-9)
L CH OUT
L/R RETURN
C CH OUT
C CH RETURN
L/R RETURN
R CH OUT
KPC6
CN20
AUDIO SIGNAL ROUTE
: FRONT L
: CENTER
: REAR L
SP SW assembly (AWZ4289)
C253
SP-A OFF ON
SP-B OFF ON
S251
SUJ6LYX3
AKN1002
HJ251
HEADPHONE
R252 2W 330
330 2W R253
J36
L G R
J19
B+/L
A+/L
B-/L
A-/L
L/R RETURN
C CH RETURN
C CH OUT
L/R RETURN
B-/R
A-/R
B+/R
A+/R
VSX-D602S ONLY
C252
FRONT SP assembly (AWZ4978 : VSX-D702S/KU, KC)
(AWZ4261 : VSX-D702S/SD)
(AWZ4257 : VSX-D602S/KU, KC)
AKE1036 : VSX-D702S/KU, KC
AKE1011 : VSX-D702S/SD
AKE-111 : VSX-D602S/KU, KC
L
SP-A
R
L
SP-B
R
J27
G C G
CN27
AKB1120
CENTER
R272 47.0k
R273 2.2k
R268 33.0k
R271 2.2k
R270 2.2k
R267 33.0k
L
Pre. Out
REAR
R
REAR SP CENTER SP assembly (AWZ4981 : VSX-D702S)
(AWZ4988 : VSX-D602S)
1W 680 R260
RY251 ASR1035
D251
Q251 : RELAY DRIVE
Q251
B C E
XDC143ES
RY251
ASR1035
JP253
VSX-D602S ONLY
AKE1032
VSX-D702S ONLY
AKE1026
CENTER SP
S3 AKX1004
CENT SP SELECT
single/dual
DUAL
COMON
SINGLE
PRE OUT assembly
(AWZ4272)
KPC3 CN36
C571
56K 1/8W
R592 2.2k 1/8W
C
R593
56K 1/8W
R594 2.2k 1/8W
R-CH
PJ
L-CH
AKB1171
To AMP assembly J21 (⇨ SCH-9)
KPC3 CN21
REAR L CH
REAR RETURN
REAR R CH
L251
ATH1004
R255 10 1/4W
R257 10 1/4W
C253 0.047
RY251
ASR1035
JP254
R261 100 1/4W
AEK-109
L CH
R CH
REAR SP
C254 1X 0.047
R258 10 1/4W
1/4W 10
R256
ATH1004
L252
RY252
RY252
1W 680 R259
RY252 ASR1035
D252
Q252
B C E
XDC143ES
D251, 252:HSS104-02
To POWER SUPPLY assembly J25 (⇨ SCH-12)
KPE4 CN25
+B RY
PROT
C/R RY
MR RY
C251

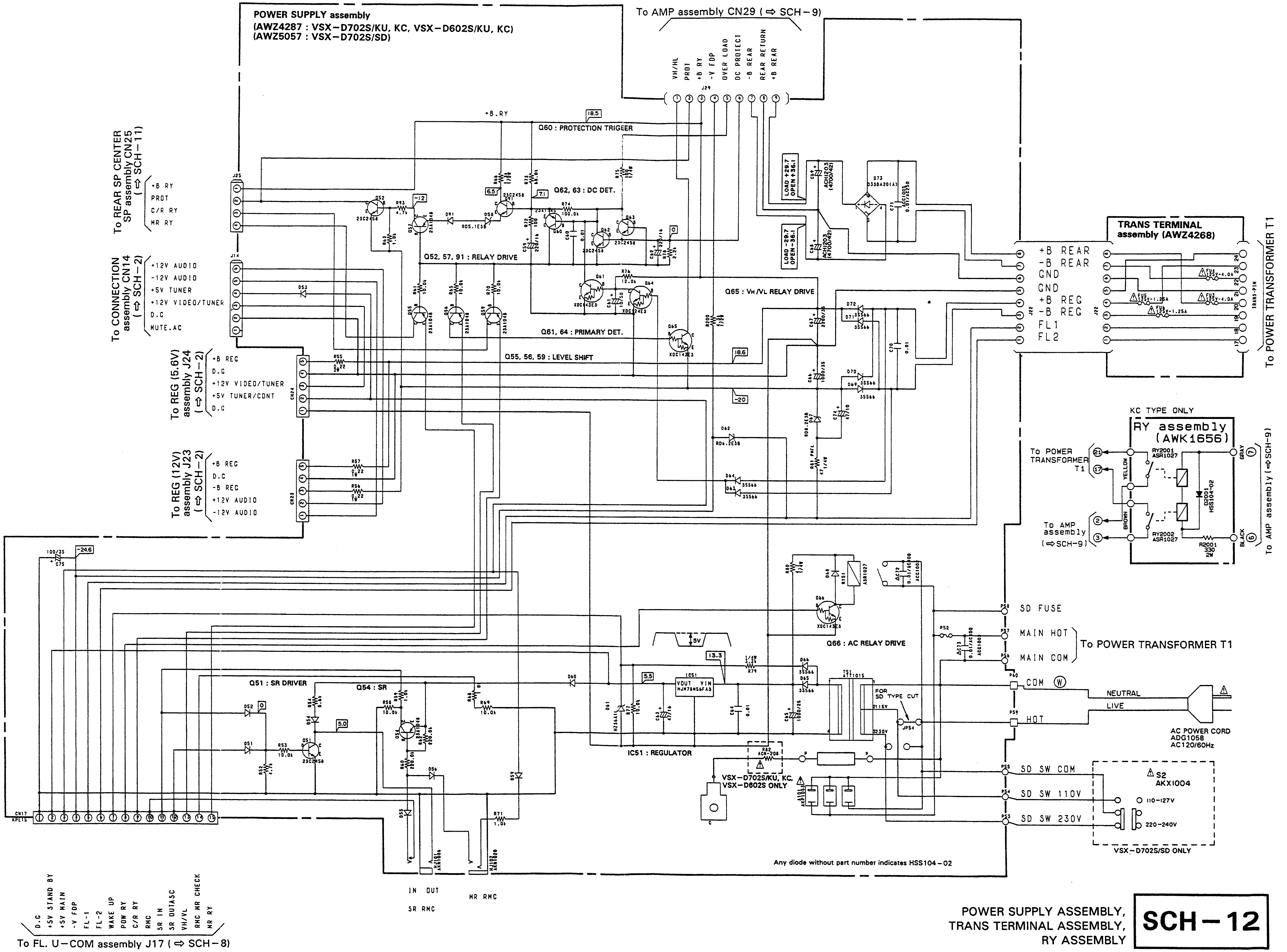
SCH-11

SP SW ASSEMBLY,
FRONT SP ASSEMBLY,
PRE OUT ASSEMBLY,
REAR SP CENTER SP ASSEMBLY

SP SW ASSEMBLY,
FRONT SP ASSEMBLY,
PRE OUT ASSEMBLY,
REAR SP CENTER SP ASSEMBLY

SCH-11

5.12 POWER SUPPLY ASSEMBLY, TRANS TERMINAL ASSEMBLY AND RY ASSEMBLY


POWER SUPPLY assembly
(AWZ4287 : VSX-D702S/KU, KC, VSX-D602S/KU, KC)
(AWZ5057 : VSX-D702S/SD)
To AMP assembly CN29 (⇨ SCH-9)
VH/HL
PROT
+B RY
-V FDP
OVER LOAD
DC PROTECT
-B REAR
REAR RETURN
+B REAR
J29
Q60 : PROTECTION TRIGEER
Q62, 63 : DC DET.
Q52, 57, 91 : RELAY DRIVE
Q61, 64 : PRIMARY DET.
Q55, 56, 59 : LEVEL SHIFT
Q65 : VH/VL RELAY DRIVE
Q66 : AC RELAY DRIVE
Q51 : SR DRIVER
Q54 : SR
IC51 : REGULATOR
To REAR SP CENTER SP assembly CN25 (⇨ SCH-11)
+B RY
PROT
C/R RY
MR RY
To CONNECTION assembly CN14 (⇨ SCH-2)
+12V AUDIO
-12V AUDIO
+5V TUNER
+12V VIDEO/TUNER
D.C
MUTE.AC
To REG (5.6V) assembly J24 (⇨ SCH-2)
+B REG
D.C
+12V VIDEO/TUNER
+5V TUNER/CONT
D.C
To REG (12V) assembly J23 (⇨ SCH-2)
+B REG
D.C
-B REG
+12V AUDIO
-12V AUDIO
LOAD +29.7
OPEN +36.1
LOAD -29.7
OPEN -36.1
TRANS TERMINAL assembly (AWZ4268)
+B REAR
-B REAR
GND
GND
+B REG
-B REG
FL1
FL2
J22
To POWER TRANSFORMER T1
KC TYPE ONLY
RY assembly (AWK1656)
To POWER TRANSFORMER T1
To AMP assembly (⇨SCH-9)
To AMP assembly (⇨SCH-9)
YELLOW
BROWN
GRAY
BLACK
RY2001 ASR1027
RY2002 ASR1027
D2001 HSS104-02
R2001 330 2W
SD FUSE
MAIN HOT
MAIN COM
To POWER TRANSFORMER T1
COM
HOT
NEUTRAL
LIVE
AC POWER CORD ADG1058 AC120/60Hz
FOR SD TYPE CUT
SD SW COM
SD SW 110V
SD SW 230V
S2 AKX1004
110-127V
220-240V
VSX-D702S/SD ONLY
VSX-D702S/KU, KC, VSX-D602S ONLY
Any diode without part number indicates HSS104-02
IN OUT
SR RMC
MR RMC
D.C
+5V STAND BY
+5V MAIN
-V FDP
FL-1
FL-2
WAKE UP
POW RY
C/R RY
RMC
SR IN
SR OUTASC
VH/VL
RMC MR CHECK
MR RY
CN17
To FL. U-COM assembly J17 (⇨ SCH-8)

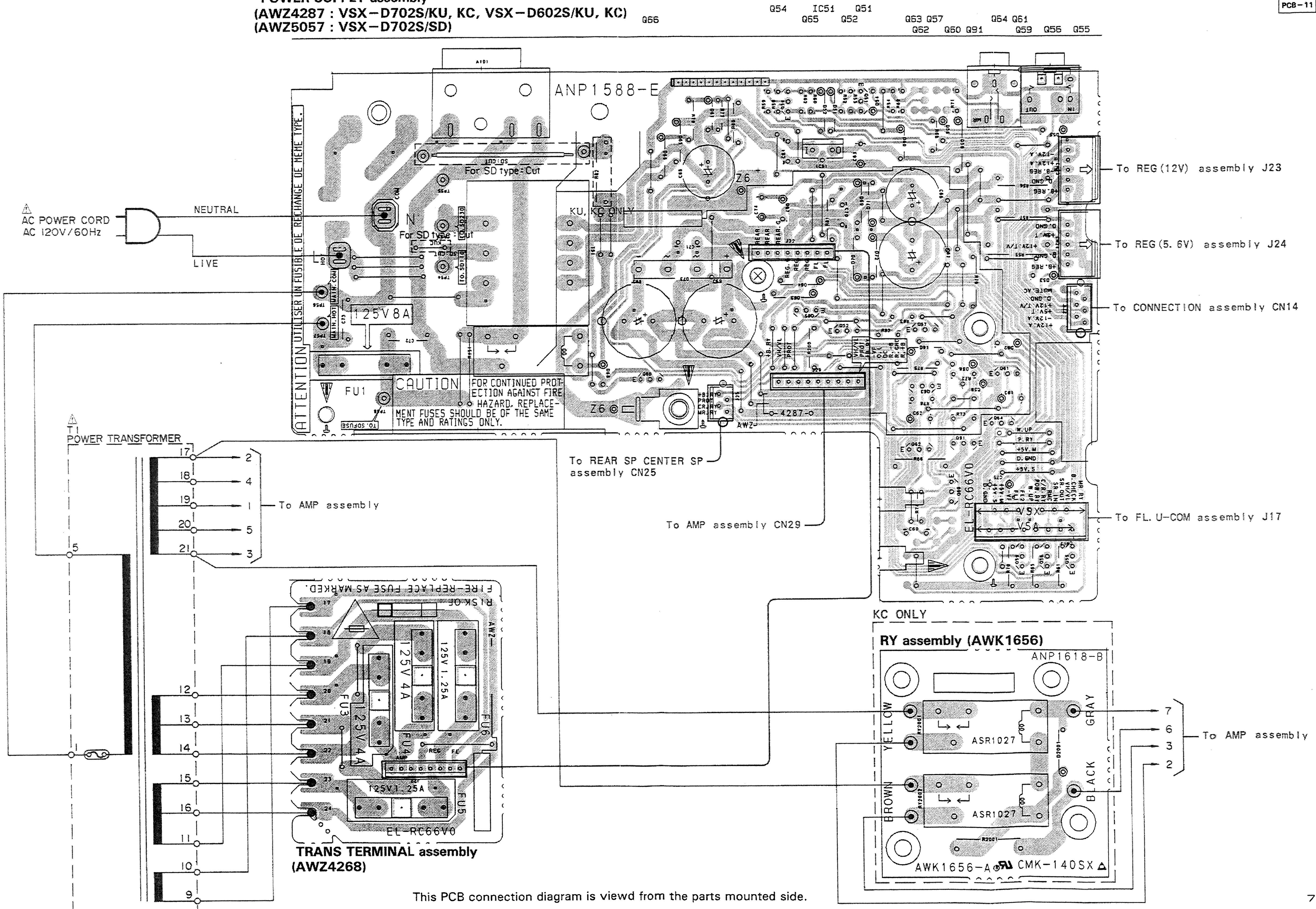
POWER SUPPLY ASSEMBLY, TRANS TERMINAL ASSEMBLY, RY ASSEMBLY

SCH-12

POWER SUPPLY ASSEMBLY,
TRANS TERMINAL ASSEMBLY,
RY ASSEMBLY

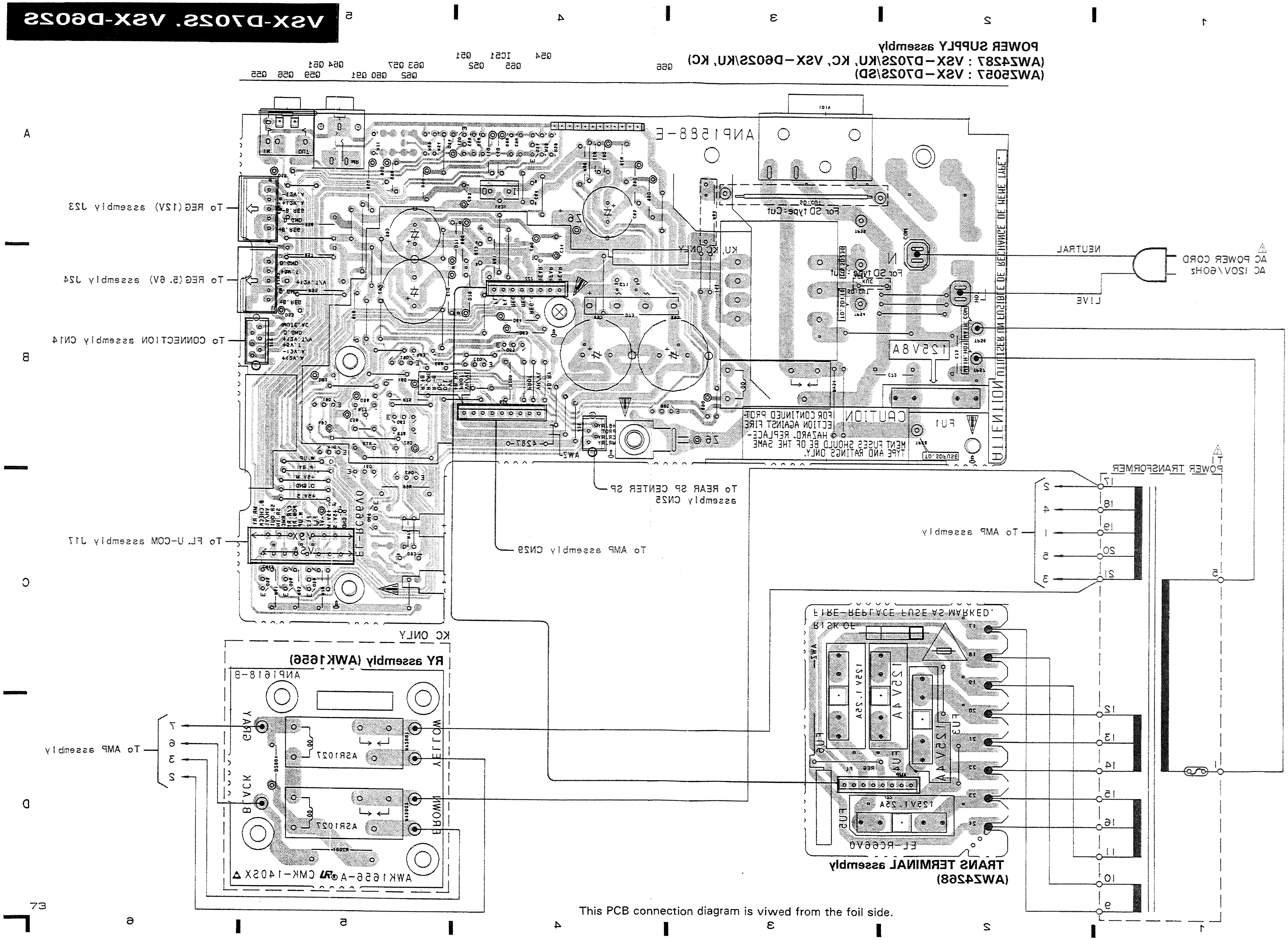
SCH-12

POWER SUPPLY assembly
(AWZ4287 : VSX−D702S/KU, KC, VSX−D602S/KU, KC)
(AWZ5057 : VSX−D702S/SD)


Q66
Q54
IC51
Q51
Q65
Q52
Q63 Q57
Q62 Q60 Q91
Q64 Q61
Q59 Q56 Q55
ANP1588-E
AC POWER CORD
AC 120V/60Hz
NEUTRAL
LIVE
N
L
For SD type : Cut
KU, KC ONLY
125V8A
FU1
CAUTION
FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACEMENT FUSES SHOULD BE OF THE SAME TYPE AND RATINGS ONLY.
ATTENTION UTILISER UN FUSIBLE DE RECHANGE DE MEME TYPE.
Z6
4287
AWZ
EL-RC66V0
To REG (12V) assembly J23
To REG (5.6V) assembly J24
To CONNECTION assembly CN14
To FL. U-COM assembly J17
To REAR SP CENTER SP assembly CN25
To AMP assembly CN29
T1
POWER TRANSFORMER
17
18
19
20
21
5
12
13
14
15
16
11
10
9
2
4
1
5
3
To AMP assembly
RISK OF FIRE-REPLACE FUSE AS MARKED.
125V 4A
125V 1.25A
125V 4A
125V 1.25A
FU3
FU4
FU5
FU6
AMP
REG
FL
EL-RC66V0
TRANS TERMINAL assembly
(AWZ4268)
KC ONLY
RY assembly (AWK1656)
ANP1618-B
YELLOW
BROWN
GRAY
BLACK
ASR1027
ASR1027
RY2001
RY2002
D2001
R2001
AWK1656-A
CMK-140SX
7
6
3
2
To AMP assembly
1
2
3
4
5
6
A
B
C
D

This PCB connection diagram is viewd from the parts mounted side.

POWER SUPPLY assembly
(AWZ4287 : VSX-D702S/KU, KC, VSX-D602S/KU, KC)
(AWZ5057 : VSX-D702S/SD)


ANP1588-E
To REG(12V) assembly J23
To REG(5.6V) assembly J24
To CONNECTION assembly CN14
To FL U-COM assembly J17
To AMP assembly CN29
To REAR SP CENTER SP assembly CN25
For SD type Cut
KU, KC ONLY
NEUTRAL
LIVE
AC POWER CORD
AC 120V/60Hz
125V8A
FU1
CAUTION
FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACEMENT FUSES SHOULD BE OF THE SAME TYPE AND RATINGS ONLY.
ATTENTION
EL-RC66V0
T1
POWER TRANSFORMER
To AMP assembly
KC ONLY
RY assembly (AWK1656)
ANP1618-B
GRAY
YELLOW
BLACK
BROWN
ASR1027
AWK1656-A CMK-140SX
To AMP assembly
RISK OF FIRE-REPLACE FUSE AS MARKED.
125V 1.25A
TRANS TERMINAL assembly
(AWZ4268)
A B C D
1 2 3 4 5 6

This PCB connection diagram is viwed from the foil side.

6. PCB PARTS LIST

NOTES :

- *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*
- *When ordering resistors, first convert resistance values into code form as shown in the following examples.*

Ex. 1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J = 5%, and K = 10%).

560Ω → 56 × 10¹ → 561 ························ RD1/8PM $\boxed{5}\boxed{6}\boxed{1}$ J
47kΩ → 47 × 10³ → 473 ························ RD1/4PS $\boxed{4}\boxed{7}\boxed{3}$ J
0.5Ω → 0R5 ·· RN2H $\boxed{0}\boxed{R}\boxed{5}$ K
1Ω → 010 ·· RS1P $\boxed{0}\boxed{1}\boxed{0}$ K

Ex. 2 When there are 3 effective digits (such as in high precision metal film resistors).

5.62kΩ → 562 × 10¹ → 5621 ·················· RM1/4PC $\boxed{5}\boxed{6}\boxed{2}\boxed{1}$ F

Mark	No.	Description	Parts No.
	LIST OF ASSEMBLIES		
◉		TUNER ASSEMBLY	AWE1140
NSP		DSP OSD ASSEMBLY	AWK1549
◉		├─ DSP ASSEMBLY	AWZ4294
◉		└─ OSD ASSEMBLY	AWZ4295
NSP		POWER AMP ASSEMBLY	AWK1715
NSP		├─ TRANS TERMINAL ASSEMBLY	AWZ4268
		├─ AMP ASSEMBLY	AWZ4286
		├─ POWER SUPPLY ASSEMBLY	AWZ4287
		├─ SP SW ASSEMBLY	AWZ4289
NSP		├─ FRONT SP ASSEMBLY	AWZ4978
		└─ REAR SP CENTER SP ASSEMBLY	AWZ4981
NSP		SMALL SIGNAL ASSEMBLY	AWK1719
		├─ AUDIO FUNCTION ASSEMBLY	AWZ4263
		├─ REG (12V) ASSEMBLY	AWZ4266
		├─ REG (5.6V) ASSEMBLY	AWZ4267
		├─ PRE OUT ASSEMBLY	AWZ4272
		├─ CONNECTION ASSEMBLY	AWZ4291
		├─ VOLUME ASSEMBLY	AWZ4292
		└─ A/V FUNCTION ASSEMBLY	AWZ4980
		FL U-COM ASSEMBLY	AWK1721
		S TERM ASSEMBLY	AWQ1017
	TUNER ASSEMBLY		
	SEMICONDUCTORS		
	IC451		AN7470P
	IC431		LA1265S
	IC471		LM7001
	Q454		2SA933S
	Q452, Q453		2SC1740S
	Q472		2SC1740SLN
	Q451		2SC2603
	Q403, Q421		2SC2668
	Q402		2SC2786
	Q405		2SK161
	Q401		2SK241
	Q471		2SK246
	Q473, Q474		RN2201
	D431−D435		1SS252
	D401−D403		1SV147
	COILS & TRANSFORMERS		
	L401		ATC1001
	L402		ATC1002
	L405		ATC1003
	L403		ATC1004
	L404		ATC1005
	T402		ATE−063
	L431		ATE−079
	F421		ATF−107
	F422		ATF−119
	F431		ATF−208
	L406, L407		LAU2R2M
	CAPACITORS		
	C454	(470p/50)	ACE1039
	C466		CCCSL121J50
	C417		CCDCH010C50
	C406		CCDCH020C50
	C415		CCDCH080D50
	C413, C481, C482		CCDCH150J50
	C414		CCDCH330J50
	C401, C404, C405		CCDRH330J50
	C402		CCDRH390J50
	C416		CCDTH180J50
	C479		CCPUSL220J50
	C445		CCPUSL470J50
	C452		CEANP4R7M35
	C442		CEAS0R1M50
	C420, C437, C475		CEAS100M50

Mark	No.	Description	Parts No.
	C451		CEAS101M16
	C456		CEAS1R5M50
	C438		CEAS2R2M50
	C443, C455		CEAS3R3M50
	C458, C463, C464, C484		CEAS470M16
	C433, C461, C462		CEAS4R7M50
	C457		CEASR22M50
	C478		CFTXA224J50
	C477		CKCYF103Z50
	C439, C440		CKCYF223Z50
	C435		CKCYF472Z50
	C453		CKCYF473Z50
	C436		CKCYX683M25
	C400		CKDYF102Z50
	C409, C483		CKPUYB101K50
	C444		CKPUYB331K50
	C441, C472		CKPUYF223Z25
	C403, C410−C412, C418, C419, C421, C422, C465, C471, C473, C476, C480, C485		CKPUYY103N16
	C459, C460		CQMA102J50
	C468, C469		CQMA182J50
	C446, C447		CQMA561K50

RESISTORS

	VR451	(4.7k)	ACP1024
	VR431	(10k)	ACP1025
	VR432		VRTS6VS153
	Other Resistors		RD1/8PM□□□J

OTHERS

	X471	(7.200MHz)	ASS1005
	X431	(450kHz)	ATF−125
		4P ANTENNA TERMINAL	AKA1014
		AM RF TUNING BLOCK	AXX1011

FL. U−COM ASSEMBLY

SEMICONDUCTORS

	IC601		PDG084D
	Q601−Q604		2SC2458
	Q606−Q610		XDC124ES
	D604		AEL1151
	D601−D603, D607−D625, D628		HSS104−02

SWITCHES

	S601, S603−S609, S611−S660		ASG1034

COILS

	L601		LAU220K

CAPACITORS

Mark	No.	Description	Parts No.
	C601	(47000/5.5V)	ACH1135
	C606		CEAS010M50
	C602		CEAS100M50
	C605		CEAS101M10
	C608		CEAS470M50
	C603		CKCYX473M25
	C607		CKPUYF223Z25
	C604		CKPUYF473Z16

RESISTORS

	All Resistors		RD1/8PM□□□J

OTHERS

	V601	FL TUBE	AAV1145
		FL SPACER	AEB1120
		1P PIN JACK (VIDEO INPUT)	AKB1082
	X601	REMOTE RECEIVER UNIT	AXX1023
	X602	(8.00MHz)	ASS1015

S TERM ASSEMBLY

SEMICONDUCTORS

	IC951, IC952		LA7951
	Q951, Q952		2SC2458
	D951, D952, D954−D957		HSS104−02
	D953		RD5.6ESB

COILS

	L951−L954		LAU820K

CAPACITORS

	C972, C973		CEANP010M50
	C951, C952, C985, C987, C989−C992		CEAS100M50
	C964, C965		CEAS101M25
	C956, C966, C969, C970		CEAS470M25
	C971, C974		CEAS471M10
	C968		CKDYF103Z50
	C958, C959, C967		CKPUYF103Z25

RESISTORS

	R964, R967		RD1/2PM151J
	R989		RD1/2PMF561J
	Other Resistors		RD1/8PM□□□J

OTHERS

	CN951		KPE6
	EN951, EN952	DIN PLUG	AKP1064

AUDIO FUNCTION ASSEMBLY

SEMICONDUCTORS

	IC801		M5220P
	IC803		NJM4558DXP
	IC802		TC9164N

CAPACITORS

	C805, C806		CCSQCH221J50
	C847		CCSQCH471J50
	C807, C808		CCSQSL101J50

Mark	No.	Description	Parts No.
	C801, C802		CEAS100M50
	C819, C820		CEAS101M16
	C815, C816, C841, C842		CEAS2R2M50
	C809, C810		CEAS470M16
	C845, C846		CEAS4R7M50
	C817, C818, C843, C844		CKSQYF103Z50
	C813, C814		CQMA242J50
	C811, C812		CQMA822J50

RESISTORS

	R847−R849		RS1/10S102J
	R839−R842		RS1/10S104J
	R829, R830, R837, R838		RS1/10S222J
	R815, R816, R845, R846		RS1/10S224J
	R811, R812		RS1/10S303J
	R803, R804, R819, R820, R827, R828, R835, R836		RS1/10S331J
	R809, R810		RS1/10S394J
	R813, R814		RS1/10S471J
	R801, R802, R817, R818, R825, R826, R831−R834		RS1/10S474J
	R805, R806		RS1/10S563J
	R807, R808		RS1/10S681J

OTHERS

	CN	4P PIN JACK (TAPE 1, 2)	AKB1181
	CN	4P PIN JACK (CD, PHONO)	AKB1201
	CN11	7P JUMPER CONNECTOR	KPE7

REG (12V)ASSEMBLY

SEMICONDUCTORS

	IC54		NJM78M12FAS
	IC55		NJM79M12FA

CAPACITORS

	C52, C53		CEAS101M35
	C56, C57		CKCYF103Z50

REG (5.6V)ASSEMBLY

SEMICONDUCTORS

	IC52		M5237L
	IC53		NJM78M56FAS
	Q51		2SA1306

CAPACITORS

	C76		CEAS010M50
	C55		CEAS101M35
	C51		CEAS470M16
	C54		CKCYF103Z50
	C58		CKCYX104M25

RESISTORS

	R83		RD1/4PMF221J
	R84		RN1/4PC3902F
	R85		RN1/4PC4301F
	R51		RS1LMF100J

TRANS TERMINAL ASSEMBLY

TRANS TERMINAL assembly has no service part.

PRE OUT ASSEMBLY

RESISTORS

Mark	No.	Description	Parts No.
		All Resistors	RD1/8PM□□□J

OTHERS

	CN	2P PIN JACK (FRONT PRE OUT)	AKB1171

AMP ASSEMBLY

SEMICONDUCTORS

	IC161, IC162		UPC1270H
	Q107, Q108		2SA1145
	Q103, Q104, Q201		2SA1240
	Q115, Q116, Q204		2SA1306
	Q105, Q106		2SA970
	Q101, Q102		2SC1845
	Q117, Q118, 206		2SC2240
	Q161−Q164		2SC2458
	Q111, Q112, Q203		2SC2603
	Q109, Q110, Q202		2SC2705
	Q113, Q114, Q205		2SC3298
	D197, D198		D5SB20F
	D101−D108, D111−D114, D117−D122, D161−D166, D199, D200, D204−D206		HSS104−02
	D109, D110, D115, D116, D201		RD10ESB
	D202, D203		RD4.3ESB

RELAY

	RY199		ASR−112
	RY198		ASR1035

COILS

	L102−L104		ATH1004

CAPACITORS

	C200	(0.01/150)	ACG1005
	C198	(8200/71)	ACH1224
	C199	(8200/71)	ACH1225
	C113, C114		CCCSL050C500
	C105−C108		CCCSL101J50
	C212, C222		CCCSL101K500
	C117−C120		CCCSL151K500
	C109, C110		CCCSL220K500
	C204, C205		CCCSL470J50
	C207		CCCSL560K500
	C169, C170		CCCSL680J50
	C123, C124		CEANP010M100
	C175, C176, C211		CEANP2R2M50
	C173, C174		CEAS100M100
	C161, C201, C203		CEAS2R2M50

Mark	No.	Description	Parts No.
	C111, C112, C208		CEAS470M16
	C209		CEAS470M25
	C101, C102		CEAS4R7M50
	C167, C168		CEHAQ101M10
	C162		CEHAQ2R2M50
	C121, C122, C210		CFTXA473J50
	C115, C116, C206, C213		CKCYB102K50
	C103, C104		CKCYB122K50
	C125, C126, C165, C166, C202		CKCYB222K50
	C171, C172		CKCYX333M25

RESISTORS

Mark	No.	Description	Parts No.
	R177, R178	(0.22, 2W)	ACN−131
	R145, R146, R218	(0.33, 5W)	ACN1087
	R208		RD1/4PM123J
	R115, R116		RD1/4PM152J
	R207		RD1/4PM431J
	R117, R118		RD1/4PM473J
	R147, R148, R220, R225		RD1/4PMF100J
	R129−R136, R214−R217		RD1/4PMF101J
	R153−R156, R179−R182, R221, R222		RD1/4PMF222J
	R210		RD1/4PMF470J
	R139−R142, R233, R234		RD1/4PMF4R7J
	R121, R122		RD1/4PMF680J
	R111−R114		RFA1/4PS391J
	R127, R128		RFA1/4PS470J
	R137, R138, R143, R144, R227−R232		RFA1/4PS4R7J
	R151, R152		RS1LMF100J
	R198, R199		RS1PMF681J
	R197		RS2LMF103J
		Other Resistors	RD1/8PM□□□J

OTHERS

Mark	No.	Description	Parts No.
	CN29		KPC9
		SCREW	ABA1009

POWER SUPPLY ASSEMBLY

SEMICONDUCTORS

Mark	No.	Description	Parts No.
	IC51		NJM78M56FAS
	Q54−Q57, Q59		2SA1048
	Q60		2SA1145
	Q51, Q52, Q62, Q63, Q91		2SC2458
	Q64		XDC124ES
	Q61, Q65, Q66		XDC143ES
	D73		D3SBA20 (A)
	D51−D56, D59, D60, D68, D91		HSS104−02
	D61		HZS6A1L
	D58		RD5.1ESB
	D62		RD6.2ESB
	D67		RD8.2ESB
	D63−D66, D69−D72		S5566

RELAY

Mark	No.	Description	Parts No.
	RY51		ASR1027

TRANSFORMER

Mark	No.	Description	Parts No.
	T51		ATT1015

CAPACITORS

Mark	No.	Description	Parts No.
⚠	C72, C73	(0.01/400)	ACG1002
	C71	(0.01/150)	ACG1005
	C68, C69	(4700/42)	ACH1203
	C61		CEAS100M50
	C75		CEAS101M35
	C65		CEAS102M25
	C66		CEAS102M35
	C59, C62		CEAS221M16
	C67		CEAS222M35
	C74		CEAS470M10
	C63		CEAS470M16
	C60, C64, C70		CKCYB103K50

RESISTORS

Mark	No.	Description	Parts No.
	R82	(2.2M,1/2W)	ACN−208
	R66		RD1/2PM132J
	R200		RD1/2PM432J
	R79		RD1/4PM332J
	R75		RD1/4PMF101J
	R80		RD1/4PMF4R7J
	R81		RD1/4PMFL470J
	R56, R57		RS1LMFR22J
	R55		RS2LMFR22J
		Other Resistors	RD1/8PM□□□J

OTHERS

Mark	No.	Description	Parts No.
	CN17	15P JUMPER CONNECTOR	KPE15
		2P MINI JACK (CONTROL)	AKN1006
		MINI JACK (REMOTE)	AKN1020
		3P AC OUTLET	AKP1053

SP SW ASSEMBLY

SWITCHES

Mark	No.	Description	Parts No.
	S251		SUJ6LYXS

RESISTORS

Mark	No.	Description	Parts No.
	R252, R253		RS2LMF331J

OTHERS

Mark	No.	Description	Parts No.
	CN20	6P JUMPER CONNECTOR	KPC6
		HEADPHONE JACK	AKN1002

CONNECTION ASSEMBLY

SEMICONDUCTORS

Mark	No.	Description	Parts No.
	IC304		M5220P

CAPACITORS

Mark	No.	Description	Parts No.
	C325, C326		CCSQCH331J50
	C323, C324		CEAS101M25

Mark	No.	Description	Parts No.
	C316		CEAS470M10
	C315		CEAS470M16
	C321, C322		CEAS4R7M50
	C318		CKSQYF473Z50
RESISTORS			
	R353, R354		RS1/10S102J
	R347−R350		RS1/10S104J
	R345, R346		RS1/10S153J
	R351, R352		RS1/10S472J
	R343, R344		RS1/10S682J
	Other Resistors		RD1/8PM□□□J
OTHERS			
	CN15	15P JUMPER CONNECTOR	KPE15
	CN14	6P JUMPER CONNECTOR	KPE6

VOLUME ASSEMBLY

Mark	No.	Description	Parts No.
SEMICONDUCTORS			
	IC561, IC564		M5220L
	IC501, IC502, IC521, IC523		NJM4558DXP
	IC524		NJM4558LD
	IC503		TA8409S
	IC522, IC525, IC562		TC9154AP
	IC563		TC9184P
	Q501		XDC124ES
	D503, D504, D521−D526, D561−D566		HSS104−02
	D506		RD3.3ESB2
	D501, D502, D505		RD5.1ESB2
CAPACITORS			
	C514		CCSQCH101J50
	C567, C568		CCSQCH121J50
	C507, C508, C559, C560		CCSQCH331J50
	C525, C526, C535, C536, C542, C549		CCSQCH470J50
	C511		CEANP101M10
	C565, C566		CEAS010M50
	C569, C570		CEAS100M50
	C512		CEAS101M16
	C561, C562		CEAS2R2M50
	C501, C502		CEAS470M10
	C503, C504, C509, C510, C516, C521, C522, C527, C528, C531, C532, C540, C543, C547, C550−C552, C579, C580		CEAS4R7M50
	C513		CEAS6R8M50
	C515		CEASR47M50
	C585		CKSQYB102K50
	C505, C506, C523, C524, C533, C534, C541, C544, C545, C548		CKSQYB103K50
	C539, C546		CKSQYB471K50
	C563, C564, C581, C582, C586, C587		CKSQYF103Z50
	C571, C572, C577, C578		CQMA153J50
	C575, C576		CQMA272J50
	C573, C574		CQMA823J50

Mark	No.	Description	Parts No.
RESISTORS			
	VR501	(100k)	ACX1075
	R517		RD1/2PM470J
	R501, R502		RD1/4PM681J
	R599		RS1/10S000J
	R514, R527, R528, R537−R539, R543, R547−R549, R561, R562, R569, R570, R585−R590		RS1/10S102J
	R525, R526, R542		RS1/10S103J
	R512, R516, R567, R568		RS1/10S104J
	R513		RS1/10S105J
	R505, R506		RS1/10S112J
	R583, R584		RS1/10S154J
	R559, R560		RS1/10S222J
	R511, R577, R578		RS1/10S223J
	R529, R530, R544		RS1/10S224J
	R523, R524, R541		RS1/10S332J
	R571, R572		RS1/10S362J
	R510		RS1/10S391J
	R531, R532, R545, R579, R580		RS1/10S392J
	R515		RS1/10S393J
	R503, R504, R521, R522, R540, R563, R564		RS1/10S473J
	R565, R566		RS1/10S474J
	R508		RS1/10S561J
	R518, R519		RS1/10S562J
	R575, R576		RS1/10S564J
	R533, R534, R546		RS1/10S623J
	R581, R582		RS1/10S821J
	R573, R574		RS1/10S823J
	Other Resistors		RD1/8PM□□□J
OTHERS			
	CN16	11P JUMPER CONNECTOR	KPE11
	CN18	9P JUMPER CONNECTOR	KPE9

DSP ASSEMBLY

Mark	No.	Description	Parts No.
SEMICONDUCTORS			
	IC1302		LH5P832N−10T
	IC1202, IC1204, IC1206, IC1209		M5238PF
	IC1201, IC1203, IC1205, IC1207, IC1208		NJM4558DXP
	IC1303		NJM78M05FAS
	IC1210		TC9162N
	IC1301		YSS215
	D1271−D1275, D1301−D1305		HSS104−02
COILS			
	F1201, F1202		ATF1071
	F1301, F1302		ATF1102
	L1301−L1305		ATX1008
CAPACITORS			
	C1203, C1204, C1233, C1234, C1237, C1238, C1252, C1256		CCSQCH101J50

Mark	No.	Description	Parts No.
	C1305, C1306		CCSQCH300J50
	C1211, C1212, C1221, C1222		CCSQCH330J50
	C1215, C1216, C1225, C1226		CCSQCH391J50
	C1255		CEANP2R2M50
	C1201, C1202, C1205, C1206, C1219, C1220, C1229, C1230, C1232, C1271, C1272		CEAS100M50
	C1273		CEAS101M10
	C1317, C1318		CEAS101M16
	C1236, C1239, C1240, C1257		CEAS220M25
	C1312		CEAS221M10
	C1301, C1309		CEAS470M10
	C1319, C1321		CEAS470M16
	C1307		CEAS4R7M50
	C1231, C1251		CEJA100M35
	C1235, C1253		CEJA220M25
	C1254		CFTXA274J50
	C1338		CKDYB561K50
	C1302, C1311, C1314, C1323		CKSQYB102K50
	C1213, C1214, C1223, C1224		CKSQYB272K50
	C1217, C1218, C1227, C1228		CKSQYB682K50
	C1324, C1325		CKSQYF103Z50
	C1274, C1308		CKSQYF104Z50
	C1303, C1310, C1313, C1320, 1322, C1326−C1330, C1332−C1337		CKSQYF473Z50
	C1315, C1316		CQSA332J50

RESISTORS

Mark	No.	Description	Parts No.
	R1307		RD1/2PMF100J
	R1321−R1331		RS1/10S000J
	R1227, R1228, R1243, R1244, R1261, R1271, R1272, R1302		RS1/10S101J
	R1235−R1242, R1304−R1306		RS1/10S102J
	R1231−R1234, R1251, R1252, R1254, R1256−R1260, R1273, R1274, R1303, R1311, R1312		RS1/10S103J
	R1201, R1202, R1245, R1246, R1255		RS1/10S104J
	R1301		RS1/10S105J
	R1253		RS1/10S152J
	R1275		RS1/10S200J
	R1203−R1206		RS1/10S332J
	R1207, R1208		RS1/10S682J
	R1211−R1216, R1221−R1226		RS1/10S822J
	Other Resistors		RD1/8PM☐☐☐J

OTHERS

Mark	No.	Description	Parts No.
	X1301	(11.2MHz)	ASS1031

OSD ASSEMBLY

SEMICONDUCTORS

Mark	No.	Description	Parts No.
	IC1105		M50554−003SP
	IC1104		UPC1377C
	IC1102		UPC78L05
	Q1109		2SA1162
	Q1101, Q1105, Q1106		2SC2458
	Q1108		2SC2712
	Q1102, Q1104		XDA124ES
	Q1103		XDC124ES
	D1101, D1104		1SS352
	D1102		HSS104−02
	D1103		RD5.1ESB

COILS

Mark	No.	Description	Parts No.
	L1102		LAU150K
	L1103, L1104		LAU270K
	L1101		LAU390K
	L1105		LAU680K

CAPACITORS

Mark	No.	Description	Parts No.
	TC1101		ACM−020
	C1152		CCSQCH050C50
	C1109, C1154, C1156		CCSQCH101J50
	C1133, C1135		CCSQCH150J50
	C1130, C1136, C1138		CCSQCH220J50
	C1134		CCSQCH330J50
	C1111		CCSQCH560J50
	C1116		CCSQCH561J50
	C1114, C1115, C1121		CEAS010M50
	C1110, C1151		CEAS100M50
	C1103, C1108		CEAS101M10
	C1104, C1113, C1128, C1144, C1157, C1158		CEAS101M16
	C1147		CEAS102M6
	C1112, C1125		CEAS2R2M50
	C1131		CEAS330M16
	C1129		CFTXA104J50
	C1123		CFTXA105J50
	C1119, C1122, C1126		CFTXA333J50
	C1118		CFTXA823J50
	C1155		CKSQYB102K50
	C1106, C1145		CKSQYB103K50
	C1117		CKSQYB152K50
	C1120		CKSQYB472K50
	C1132, C1137, C1139		CKSQYF103Z50
	C1127		CKSQYF473Z50
	C1124		CQSA562J50

RESISTORS

Mark	No.	Description	Parts No.
	VR1101		VRTS6HS103
	VR1102		VRTS6HS472
	R1141		RD1/2PM221J
	R1101		RD1/4PM101J
	R1102		RD1/4PM4R7J
	R1127		RD1/4PMF100J
	R1118		RN1/4PC1202F
	R1154, R1156		RS1/10S000J
	R1125, R1148, R1152		RS1/10S101J
	R1103−R1105		RS1/10S102J
	R1113, R1114, R1119, R1121−R1123, R1126, R1132, R1133, R1143		RS1/10S103J
	R1110		RS1/10S104J
	R1138		RS1/10S123J

Mark	No.	Description	Parts No.
	R1116, R1120		RS1/10S153J
	R1111, R1112		RS1/10S221J
	R1106, R1109, R1117, R1135		RS1/10S222J
	R1128−R1131		RS1/10S223J
	R1108, R1134, R1136, R1137, R1153		RS1/10S472J
	R1124		RS1/10S562J
	R1145		RS1/10S680J
	R1107		RS1/10S682J
	R1115		RS1/10S683J
	R1139		RS1/10S822J
		Other Resistors	RD1/8PM☐☐☐J

OTHERS

	CN35	6P JUMPER CONNECTOR	KPE6
	CN31	9P JUMPER CONNECTOR	KPE9
	X1101	(14.31818MHz)	ASS1056
		1P PIN JACK (VIDEO OUTPUT)	AKB1145

FRONT SP ASSEMBLY

OTHERS

		8P SPEAKER TERMINAL	AKE1036

A/V FUNCTION ASSEMBLY

SEMICONDUCTORS

	IC881		LA7951
	IC882		NJM2233BS
	IC851		TC9163N
	Q881, Q882		2SC2458
	D851, D852		1SS352

CAPACITORS

	C873		CCSQCH471J50
	C886, C891, C896, C897		CEAS101M16
	C881−C885, C892, C893		CEAS470M16
	C889, C890		CEAS471M6
	C871, C872, C887, C898−C900		CKSQYB103K50

RESISTORS

	R890, R894		RD1/2PM151J
	R904, R905, R907−R911		RS1/10S000J
	R901, R902		RS1/10S101J
	R875−R877, R885−R887, R898		RS1/10S102J
	R892, R896		RS1/10S103J
	R891, R895		RS1/10S122J
	R903, R906		RS1/10S151J
	R863, R864, R871, R872		RS1/10S222J
	R853, R854, R857, R858, R861, R862, R869, R870		RS1/10S331J
	R851, R852, R855, R856, R859, R860, R865−R868, R873, R874		RS1/10S474J
	R893, R897		RS1/10S680J
	R881−R884		RS1/10S750J
		Other Resistors	RD1/8PM☐☐☐J

Mark	No.	Description	Parts No.

OTHERS

		3P PIN JACK (VCR1, 2, LD, TV)	AKB1102

REAR SP CENTER SP ASSEMBLY

SEMICONDUCTORS

	Q251, Q252		XDC143ES
	D251, D525		HSS104−02

RELAY

	RY251, RY252		ASR1035

COILS

	L251, L252		ATH1004

CAPACITORS

	C253, C254		CFTXA473J50

RESISTORS

	R255−R258		RD1/4PMF100J
	R259, R260		RS1LMF681J
		Other Resistors	RD1/8PM☐☐☐J

OTHERS

	CN25	4P JUMPER CONNECTOR	KPE4
		3P PIN JACK (CENTER, REAR PRE OUT)	AKB1120
		4P SPEAKER TERMINAL (REAR SP)	AKE−109
		4P SPEAKER TERMINAL (CENTER SP)	AKE1026

7. ADJUSTMENTS

7.1 TUNER SECTION

1. Wiring ······ Connect the wires as shown in Fig. 7−1 (FM ANT. terminal : 75Ω).
2. Preset ······ Set the VR451 to center position.
3. When the SD model is used, set the band select switch to AM : 10kHz/FM : 100kHz.

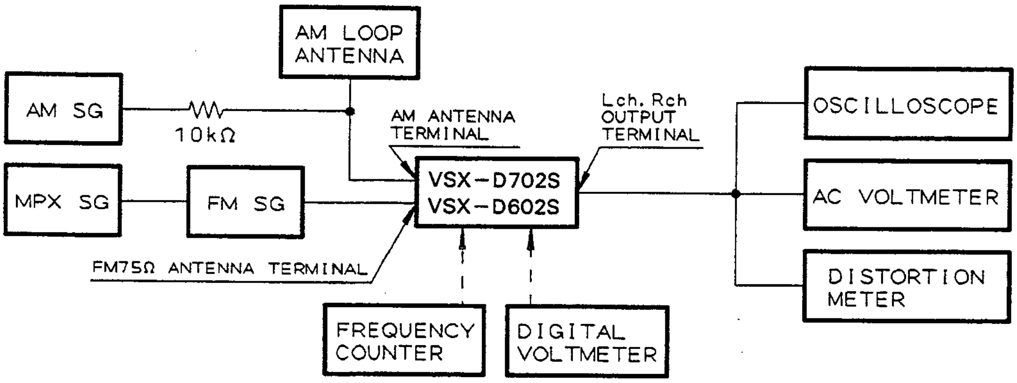

AM LOOP ANTENNA
AM SG
10kΩ
AM ANTENNA TERMINAL
Lch. Rch OUTPUT TERMINAL
OSCILLOSCOPE
MPX SG
FM SG
VSX−D702S
VSX−D602S
AC VOLTMETER
FM75Ω ANTENNA TERMINAL
DISTORTION METER
FREQUENCY COUNTER
DIGITAL VOLTMETER

Fig. 7−1 AM and FM adjustment wiring diagram

Note : Stereo modulation Main 1kHz, L+R, ±68.25kHz dev.
Pilot 19kHz, ±6.75kHz dev.

FM Section

Order	Item	SSG			Receiving frequency	Adjustment	
		Frequency	Modulation	Level		Adjustment location	Remarks
1	Checking front end VT	No signal			108MHz	—	Check that the voltage between terminal 41 and GND is 8.7±2.0V.
2	Checking front end VT				87.5MHz	—	Check that the voltage between terminal 41 and GND is 3.4±1.5V.
3	Increasing front end sensitivity	98MHz	—	Weak input	98MHz	L402, L404, T402	Set the the voltage between terminal 43 and GND to maximum, and check that the practical sensitivity is as specified.
4	Center adjustment	98MHz	—	60dBμV	98MHz	L431	Adjust the voltage between terminals 45 and 46 to 0±50mV.
5	Checking monophonic distortion	98MHz	1kHz ±75kHz dev.	60dBμV	98MHz	—	Check that the monophonic distortion is as specified.
6	Adjusting VCO	—	OFF	60dBμV	—	VR451	Adjust the output of terminal 44 to 76.0kHz±1.0kHz.
7	Adjusting stereo distortion	98MHz	L-ONLY R-ONLY	60dBμV	98MHz	T402	Minimize the distortion within 1/4 rotation of the core, and check conformity to the specification.
8	Checking separation	98MHz	L-ONLY R-ONLY	60dBμV	98MHz	—	Check that the seperation of L → R and R → L is as specified. ∗1
9	Checking lighting levels of TUNED and STEREO IND.	98MHz	STEREO	10dBμV $\left(\begin{smallmatrix}+1\text{dB}\\-2\text{dB}\end{smallmatrix}\right)$	98MHz	VR432	Adjust TUNED and STEREO IND. to start lighting.

∗1 : More than 30dB.

AM Section

Order	Item	SSG			Receiving frequency	Adjustment	
		Frequency	Modulation	Level		Adjustment location	Remarks
1	Checking front end VT	No signal			1700kHz	—	Check that the voltage between terminal 41 and GND is 7.5±1.0V.
2	Checking front end VT				530kHz	—	Check that the voltage between terminal 41 and GND is 1.5±0.5V.
3	Checking front end sensitivity	1000kHz	400kHz 30% MOD.	Practical sensitivity level	1000kHz	—	Check that the practical sensitivity (maximum sensitivity) is as specified. *2
4	Adjusting lighting level of TUNED IND.	1000kHz	—	—	1000kHz	VR431	Adjust the lighting level of TUNED IND. to 55dBμV/m±3dB.

*2 : 65dBμV/m or less.

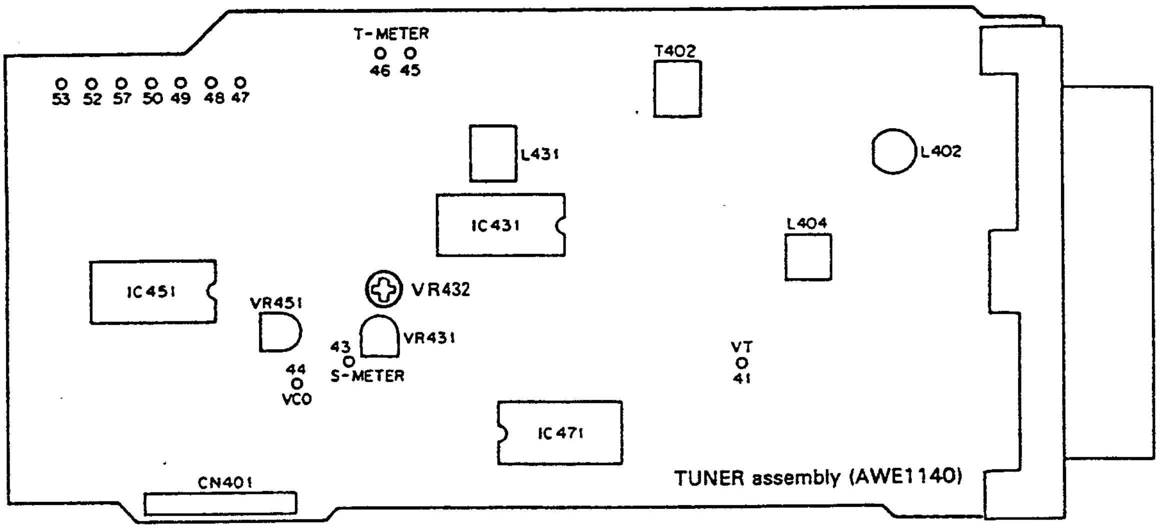

T-METER
46 45
53 52 57 50 49 48 47
T402
L431
L402
IC431
L404
IC451
VR451
VR432
43
VR431
44
VCO
S-METER
VT
41
IC471
CN401
TUNER assembly (AWE1140)

Fig. 7－2 Adjustment points

7.2 OSD ASSEMBLY SECTION

7.2.1 Adjusting H. SYNC and V. SYNC for Superimposed Display.

1. Adjust the VR1102 so that the application of power without any signal causes the OSD assembly's JP (H) to show a frequency of 15.75kHz±50Hz.
2. Adjust the VR1101 so that the application of power without any signal causes the OSD assembly's JP (V) to show a frequency of 53Hz±1Hz.

7.2.2 Adjusting the Superimposed Display in the Center

- Connect the VIDEO OUT (TO MONITOR TV) terminal to a monitor TV.

1. Turn the SIMULATED STEREO switch ON.
2. Then, turn the SIMULATED STEREO switch OFF.
3. Then adjust the TC1101 to center the superimposed display " SIMULATED STEREO OFF ", leaving equal margin on both right and left of the TV screen.

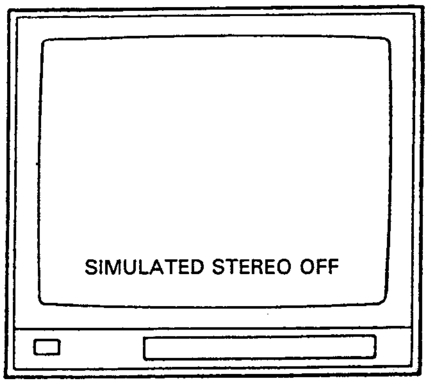


Fig. 7–3

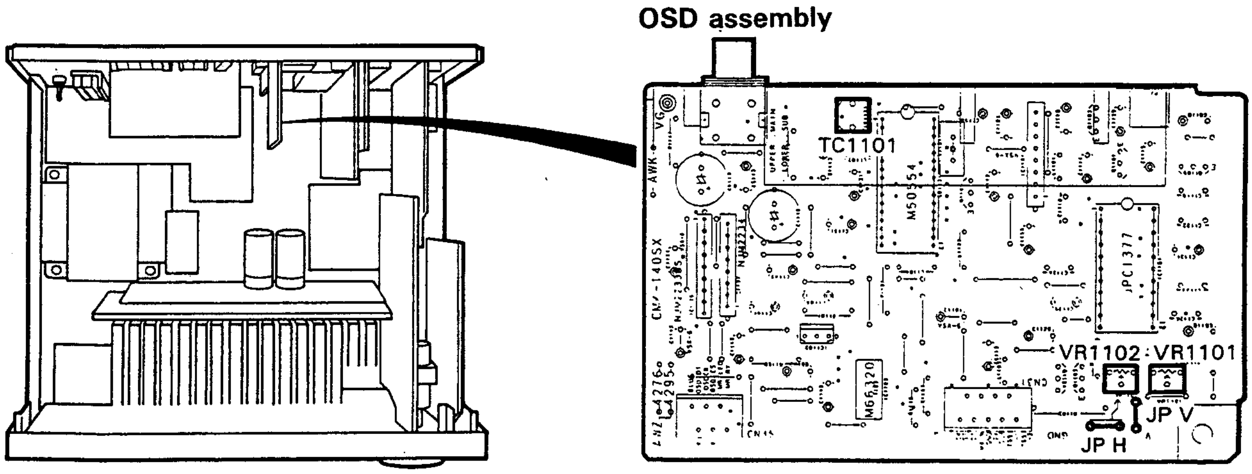


Fig. 7–4 Adjustment points

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DOLBY and the double-D symbol ◻◻ are trademarks of Dolby Laboratories Licensing Corporation.

8. REMOTE CONTROL UNIT [CU−VSX048 (AXD1268)]

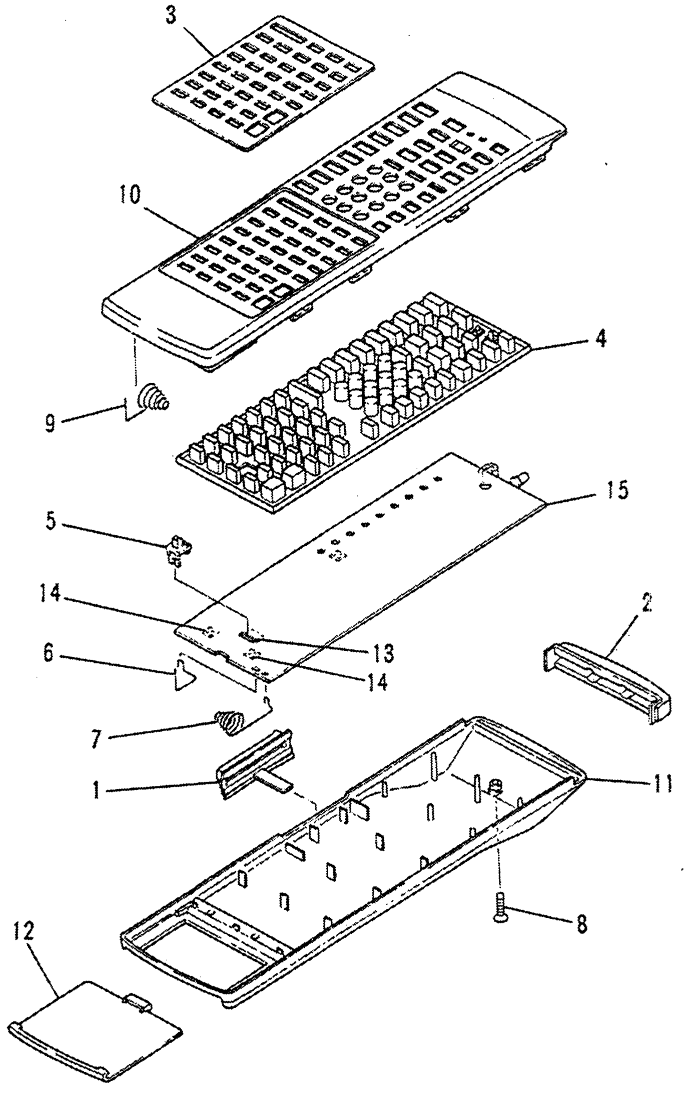
8.1 EXPLODED VIEW AND PARTS LIST

NOTES :

- *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*

Parts list of Exterior

Mark	No.	Description	Parts No.
	1	MODE CHECK KEY	AZA1335
	2	FILTER	AZA1336
	3	PLATE	AZA1367
	4	RUBBER SHEET	AZA1362
	5	KNOB	AZA1349
	6	TERMINAL (+)	AZB1327
	7	TERMINAL (−)	AZB1328
	8	SCREW	AZB1329
	9	TERMINAL (C)	AZB1330
	10	CASE (A)	AZN2089
	11	CASE (B)	AZN2090
	12	BATTERY COVER	AZN2091
	13	SLIDE SW	AZS1117
	14	TACT SW	AZS1118
NSP	15	P. C. BOARD	AZW1130



8.2 PCB PARTS LIST

NOTES :

- *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*
- *When ordering resistors, first convert resistance values into code form as shown in the following examples.*

Ex. 1 *When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J = 5%, and K = 10%).*

$560\Omega \rightarrow 56 \times 10^1 \rightarrow 561$ .... *RD1/8PM* $\boxed{5}\boxed{6}\boxed{1}$ *J*
$47k\Omega \rightarrow 47 \times 10^3 \rightarrow 473$ .... *RD1/4PS* $\boxed{4}\boxed{7}\boxed{3}$ *J*
$0.5\Omega \rightarrow 0R5$ .... *RN2H* $\boxed{0}\boxed{R}\boxed{5}$ *K*
$1\Omega \rightarrow 010$ .... *RS1P* $\boxed{0}\boxed{1}\boxed{0}$ *K*

Ex. 2 *When there are 3 effective digits (such as in high precision metal film resistors).*

$5.62k\Omega \rightarrow 562 \times 10^1 \rightarrow 5621$ .... *RM1/4PC* $\boxed{5}\boxed{6}\boxed{2}\boxed{1}$ *F*

Mark	No.	Description	Parts No.
SEMICONDUCTORS			
	IC1	μ−COM	ACM001−029
	IC2	IC	AZC1564
	IC3	LOGIC IC	MC74HC138F
	Q1, Q2	CHIP TRANSISTOR	2SC3052E
	Q3, Q4	TRANSISTOR	2SD1622
	D1−D6	DIODE	DWA010−TE
	D9−D17	LED	AZC1573
	D7	LED	SLR−938C
	D8	DIODE	SPS−503C−3
CAPACITORS			
	C1, C2	CERAMIC CAPACITOR	CCDSL330J50
	C3	CERAMIC CAPACITOR	CCDSL221J50
	C4	CERAMIC CAPACITOR	CKDYX104M25
	C5	ELECT. CAPACITOR	CEAS470M10
	C6	CERAMIC CAPACITOR	CKDYB103K50
	C7	ELECT. CAPACITOR	CEAS221M10
	C8	ELECT. CAPACITOR	CEAS4R7M50
RESISTORS			
	R7, R8	CARBON FILM RESISTOR	RD1/4PMFL1R5J
		Other resistors	RD1/8PM□□□J
OTHERS			
	X1	RESONATOR	AZC1570

8.3 SCHEMATIC DIAGRAM

NOTE)

JP2 : The terminal for switching Fc (carrier frequency of the fixed code). This terminal is set at OPEN (Fc = 40kHz) when delivered. If a product of another manufacturer accidentally receives the PIONEER code, short the terminal so that Fc will be 36.7kHz. (In which case, the learned code and preset code do not change.)

JP3 : This remote control saves the learned data, timing data in ROM and other data (such as code data) in RAM. ROM already contains the timing data for other primary manufacturers. JP3 is a terminal for switching whether or not to use that pre-loaded timing data during learning.
This terminal is set at OPEN when delivered. If "data is learned but the product does not operate," there is the rare possibility that learned timing data is affected by the timing data for another primary manufacturer in ROM, causing the receiving product to be deactivated. In such a case, short JP3 to clear all the learned data and restart data learning, so that the data precision is increased. (In which case, the learned data in RAM is shared as is.)

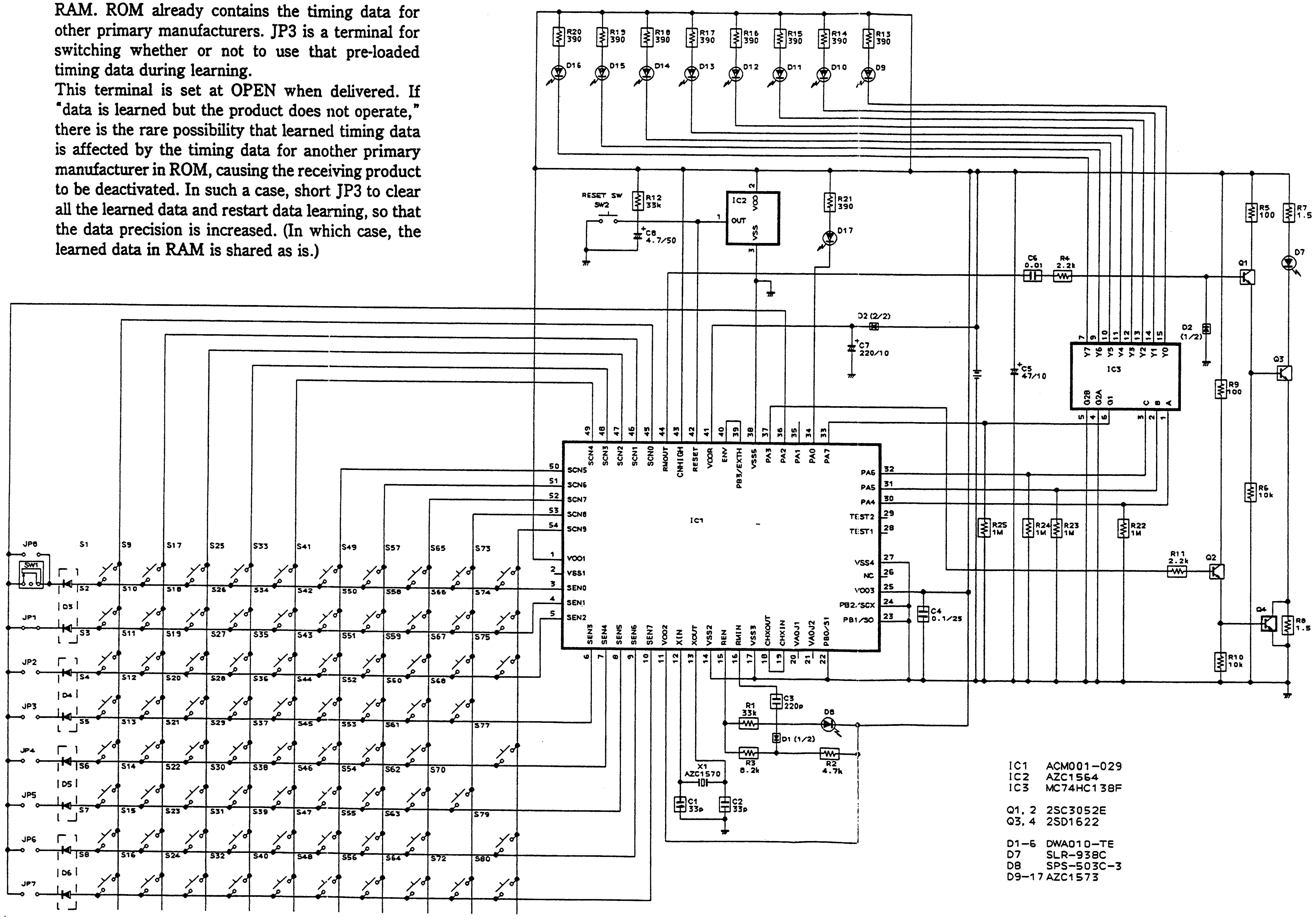
NOTE:

–▭– : Indicates a chip resistor.
–╪– : Indicates a chip capacitor.
⊠ : Indicates a chip transistor.
⊞ : Indicates a chip diode.

Note: (Type 2)

1. **When ordering service parts, be sure to refer to "PARTS LIST of EXPLODED VIEWS" or "PCB PARTS LIST".**
2. **Since these are basic circuits, some parts of them or the values of some components may be changed for improvement.**
3. **RESISTORS:**
   Unit: k:kΩ, M:MΩ, or Ω unless otherwise noted.
   Rated power: 1/4W, 1/6W, 1/8W, 1/10W unless otherwise noted.
   Tolerance: (F): ±1%, (G): ±2%, (K): ±10%, (M): ±20% or ±5% unless otherwise noted.
4. **CAPACITORS:**
   Unit: p:pF or μF unless otherwise noted.
   Ratings: capacitor (μF)/ voltage (V) unless otherwise noted.
   Rated voltage: 50V except for electrolytic capacitors.
5. **COILS:**
   Unit: m:mH or μH unless otherwise noted.
6. **VOLTAGE AND CURRENT:**
   ▭ : DC voltage (V) at no input signal unless otherwise noted.
   ⇦ mA or ← mA : DC current at no input signal unless otherwise noted.
7. **OTHERS:**
   - ⊘ : Adjusting point.
   - The ⚠ mark found on some component parts indicates the importance of the safety factor of the parts. Therefore, when replacing, be sure to use parts of identical designation.
8. **SWITCHES** (Underline indicates switch position):

SW1 : CENT.·BAL./REAR·REAR BAL.
SW2 : RESET
S1 : VCR1
S2 : VCR2
S3 : LD
S4 : TV
S5 : CD
S6 : TUNER
S7 : DECK Ⅰ
S8 : DECK Ⅱ
S9 : DAT
S10 : MODE CHECK
S11 : LEARN
S12 : EDIT
S13 : MULTI COMMAND
S14 : M.CLEAR
S15 : POWER
S16 : ⏮
S17 : REC
S18 : ⏭
S19 : ◀◀
S20 : ◀ (SEARCH)
S21 : ▶▶
S22 : ⏸
S23 : ■
S24 : ▶
S25 : TV/VCR (+10)
S26 : SELECT (DISP)
S27 : TV FUNC (BAND)
S28 : 1
S29 : 2
S30 : 3
S31 : 4
S32 : 5
S33 : 6
S34 : 7
S35 : 8
S36 : 9
S37 : 10/0
S38 : 11/PGM
S39 : 12/CLEAR
S40 : CUSTOM (TV VOL+)
S41 : SCAN (TV VOL−)
S42 : FREQ CH (Λ)
S43 : FREQ CH (V)
S44 : RECEIVER POWER
S45 : AUTO SOURCE CONTROL 1
S46 : AUTO SOURCE CONTROL 2
S47 : SLEEP
S48 : VCR1
S49 : VCR2
S50 : LD
S51 : TV
S52 : VIDEO
S53 : TAPE1/DAT
S54 : TAPE2/MONITOR
S55 : CD
S56 : TUNER
S57 : PHONO
S58 : SIMULATED STEREO
S59 : ACOUSTIC
S60 : V.SEL
S61 : DISPLAY
S62 : RETURN
S63 : SURR MODE
S64 : 3CH LOGIC
S65 : CENTER MODE
S66 : TEST TONE
S67 : MUTING
S68 : EFFECT +
S70 : CENTER +
S72 : EFFECT −
S73 : REAR L
S74 : REAR R
S75 : DELAY TIME
S77 : CENTER −
S79 : MASTER VOLUME +
S80 : MASTER VOLUME −


R20 390
R19 390
R18 390
R17 390
R16 390
R15 390
R14 390
R13 390
D16
D15
D14
D13
D12
D11
D10
D9
RESET SW SW2
R12 33k
C8 4.7/50
IC2
VDD
OUT
VSS
R21 390
D17
C6 0.01
R4 2.2k
R5 100
R7 1.5
D7
Q1
D2 (2/2)
C7 220/10
C5 47/10
D2 (1/2)
IC3
Y7 Y6 Y5 Y4 Y3 Y2 Y1 Y0
G2B G2A G1 C B A
Q3
R9 100
R6 10k
IC1
SCN4 SCN3 SCN2 SCN1 SCN0 RMOUT CNHIGH RESET VDDR ENV PB3/EXTH VSS5 PA3 PA2 PA1 PA0 PA7
SCN5 SCN6 SCN7 SCN8 SCN9
VDD1 VSS1 SEN0 SEN1 SEN2
PA6 PA5 PA4 TEST2 TEST1
VSS4 NC VDD3 PB2/SCX PB1/SO
SEN3 SEN4 SEN5 SEN6 SEN7 VDD2 XIN XOUT VSS2 REN RMIN VSS3 CHXOUT CHXIN VADJ1 VADJ2 PB0/SI
C4 0.1/25
R25 1M
R24 1M
R23 1M
R22 1M
R11 2.2k
Q2
Q4
R8 1.5
R10 10k
C3 220p
R1 33k
D8
D1 (1/2)
R3 8.2k
R2 4.7k
X1 AZC1570
C1 33p
C2 33p
JP8
SW1
JP1
JP2
JP3
JP4
JP5
JP6
JP7
D3
D4
D5
D6
S1 S9 S17 S25 S33 S41 S49 S57 S65 S73

IC1 ACM001-029
IC2 AZC1564
IC3 MC74HC138F

Q1, 2 2SC3052E
Q3, 4 2SD1622

D1-6 DWA010-TE
D7 SLR-938C
D8 SPS-503C-3
D9-17 AZC1573

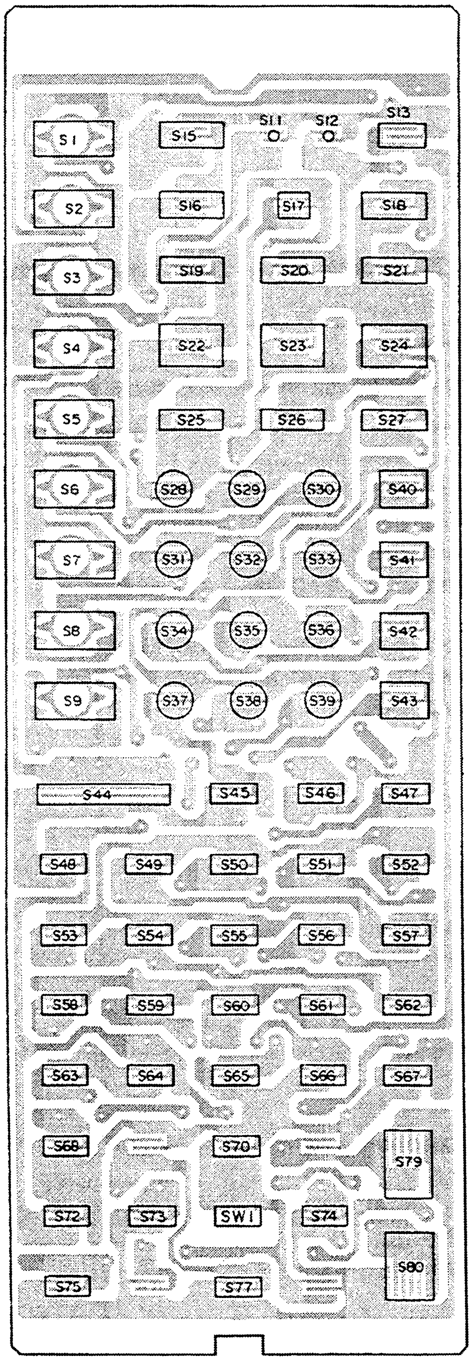
8.4 PCB PATTERN

▭ : Indicates a chip resistor.

▮ : Indicates a chip capacitor.

⊠ : Indicates a chip transistor.

▶| : Indicates a chip diode.


S1
S2
S3
S4
S5
S6
S7
S8
S9
S11
S12
S13
S15
S16
S17
S18
S19
S20
S21
S22
S23
S24
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S26
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S62
S63
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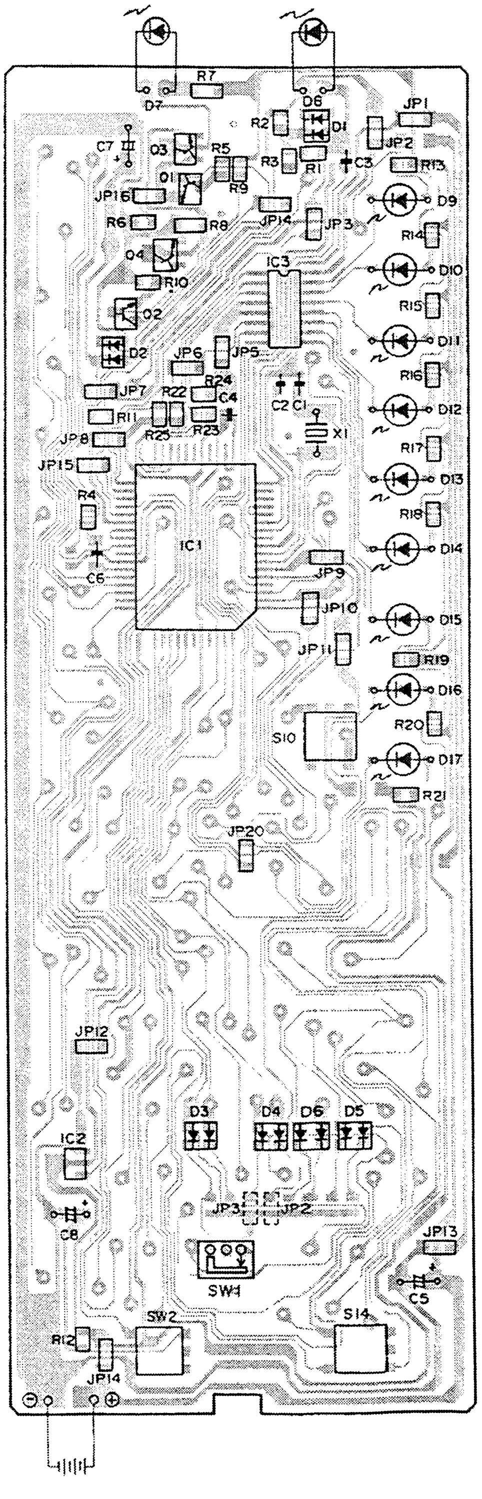
S67
S68
S70
S72
S73
SW1
S74
S75
S77
S79
S80


D7
R7
D6
D1
R2
JP1
JP2
C7
Q3
R5
R3
R1
C3
R13
Q1
R9
JP16
D9
JP14
JP3
R6
R8
R14
Q4
D10
R10
IC3
Q2
R15
D11
D2
JP6
JP5
R24
R16
JP7
R22
C4
C2
C1
D12
R11
R25
R23
X1
JP8
R17
JP15
D13
R4
R18
IC1
D14
C6
JP9
JP10
D15
JP11
R19
D16
R20
S10
D17
R21
JP20
JP12
D3
D4
D6
D5
IC2
JP3
JP2
C8
JP13
SW1
C5
SW2
S14
R12
JP14
⊖
⊕

9. FOR VSX−D702S/KC, SD, VSX−D602S/KU AND KC TYPES

NOTES :

- *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*
- *When ordering resistors, first convert resistance values into code form as shown in the following examples.*

Ex. 1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J = 5%, and K = 10%).

560Ω → 56 × 10^1 → 561 .... RD1/8PM $\boxed{5}\boxed{6}\boxed{1}$ J
47kΩ → 47 × 10^3 → 473 .... RD1/4PS $\boxed{4}\boxed{7}\boxed{3}$ J
0.5Ω → 0R5 .... RN2H $\boxed{0}\boxed{R}\boxed{5}$ K
1Ω → 010 .... RS1P $\boxed{0}\boxed{1}\boxed{0}$ K

Ex. 2 When there are 3 effective digits (such as in high precision metal film resistors).

5.62kΩ → 562 × 10^1 → 5621 .... RM1/4PC $\boxed{5}\boxed{6}\boxed{2}\boxed{1}$ F

9.1 CONTRAST OF MISCELLANEOUS PARTS

VSX−D702S/KC, SD, VSX−D602S/KU, KC and VSX−D702S/KU have the same construction except for the following :

Mark	Symbol & Description	Part No.					Remarks
		VSX−D702S/ KU	VSX−D702S/ KC	VSX−D702S/ SD	VSX−D602S/ KU	VSX−D602S/ KC	
◉	OSD assembly	AWZ4295	AWZ4295	....	....	....	
	AMP assembly	AWZ4286	AWZ4729	AWZ4286	AWZ4286	AWZ4729	
	POWER SUPPLY assembly	AWZ4287	AWZ4287	AWZ5057	AWZ4287	AWZ4287	
NSP	FRONT SP assembly	AWZ4978	AWZ4978	AWZ4261	AWZ4257	AWZ4257	
	REAR SP CENTER SP assembly	AWZ4981	AWZ4981	AWZ4981	AWZ4288	AWZ4288	
	A/V FUNCTION assembly	AWZ4980	AWZ4980	AWZ4384	AWZ4293	AWZ4293	
	FL U-COM assembly	AWK1721	AWK1721	AWK1733	AWK1612	AWK1612	*1
	S TERM assembly	AWQ1017	AWQ1017	AWQ1017	....	....	
	RY assembly	....	AWK1656	....	....	AWK1656	
⚠	S1 Voltage selector (AC110V/120−127V/220V/240V)	....	....	AKX−507	....	....	
⚠	S2 Voltage selector (AC110V−127V/220V−240V)	....	....	AKX1004	....	....	
⚠	S3 Center SP switch	AKX1004	AKX1004	AKX1004	....	....	
⚠	S4 Slide switch (9k/10k)	....	....	ASH−004	....	....	
⚠	T1 Power transformer (AC120V)	ATS1495	ATS1447	....	ATS1426	ATS1447	
⚠	T1 Power transformer (AC110V/120−127V/220V/240V)	....	....	ATS1427	....	....	
⚠	C1, C2 Capacitor (0.01μF)	....	....	ACG1003	....	....	
⚠	FU1 Fuse (8A/125V)	AEK1002	AEK1002	....	AEK1002	AEK1002	
⚠	FU1 Fuse (4A/125V)	....	....	AEK−125	....	....	
⚠	FU2 Fuse (4A/125V)	....	....	AEK−125	....	....	
NSP	Fuse holder	....	....	AKR1001	....	....	

**1 : Although AWK1733 and AWK1721 are different in part number, they have the same service parts.*

Mark	Symbol & Description	Part No.					Remarks
		VSX−D702S/ KU	VSX−D702S/ KC	VSX−D702S/ SD	VSX−D602S/ KU	VSX−D602S/ KC	
⚠	AC Power cord	ADG1058	ADG1058	ADG1051	ADG1058	ADG1058	
⚠	Cord stopper	AEP−113	AEP−113	AEC−882	AEP−113	AEP−113	
	Screw	....	....	VMZ26P040FZK	....	....	For Slide switch S4
	Master VOL assembly	AAB1119	AAB1119	AAB1119	AAB1207	AAB1207	
	Front panel	AMB2131	AMB2131	AMB2131	AMB2132	AMB2132	
NSP	Rear panel	ANC2069	ANC2069	ANC2070	ANC2072	ANC2072	
NSP	Barrier	....	....	AEC1412	....	....	
NSP	PCB holder	....	....	....	ANG−502	ANG−502	
NSP	Heat sink	ANH1436	ANH1436	ANH1436	....	ANH1436	
	Screw	ABA1007	ABA1007	ABA1007	....	....	
	Packing case	AHD2516	AHD2516	AHD2517	AHD2519	AHD2519	
	Operating instructions (French)	....	ARC1413	....	....	ARC1413	

AMP ASSEMBLY

AWZ4729 and AWZ4286 have the same construction except for the following :

Mark	Symbol & Description	Part No.		Remarks
		AWZ4286	AWZ4729	
	D200	HSS104−02	....	
	RY198	ASR1035	....	
	R199	RS1PMF681J	....	

POWER SUPPLY ASSEMBLY

AWZ5057 and AWZ4287 have the same construction except for the following :

Mark	Symbol & Description	Part No.		Remarks
		AWZ4287	AWZ5057	
	R82 (2.2M, 1/2W)	ACN−208	....	

FRONT SP ASSEMBLY

AWZ4261, AWZ4257 and AWZ4978 have the same construction except for the following :

Mark	Symbol & Description	Part No.			Remarks
		AWZ4978	AWZ4261	AWZ4257	
	Speaker terminal 8P	AKE1036	AKE1011	AKE−111	

REAR SP CENTER SP ASSEMBLY

AWZ4288 and AWZ4981 have the same construction except for the following :

Mark	Symbol & Description	Part No.		Remarks
		AWZ4981	AWZ4288	
	Speaker terminal 4P	AKE1026	....	
	Speaker terminal 2P	....	AKE1032	

A/V FUNCTION ASSEMBLY

AWZ4384, AWZ4293 and AWZ4980 have the same construction except for the following :

Mark	Symbol & Description	Part No.			Remarks
		AWZ4980	AWZ4384	AWZ4293	
	C888	....	CEAS471M6	CEAS471M6	
	R888	....	RS1/10S103J	RS1/10S103J	
	R889	....	RS1/10S680J	RS1/10S680J	
	R912	RD1/8PM100J	....	....	
	Pin jack 1P	....	AKB1145	AKB1145	MONITOR OUT

FL U-COM ASSEMBLY

AWK1612 and AWK1721 have the same construction except for the following :

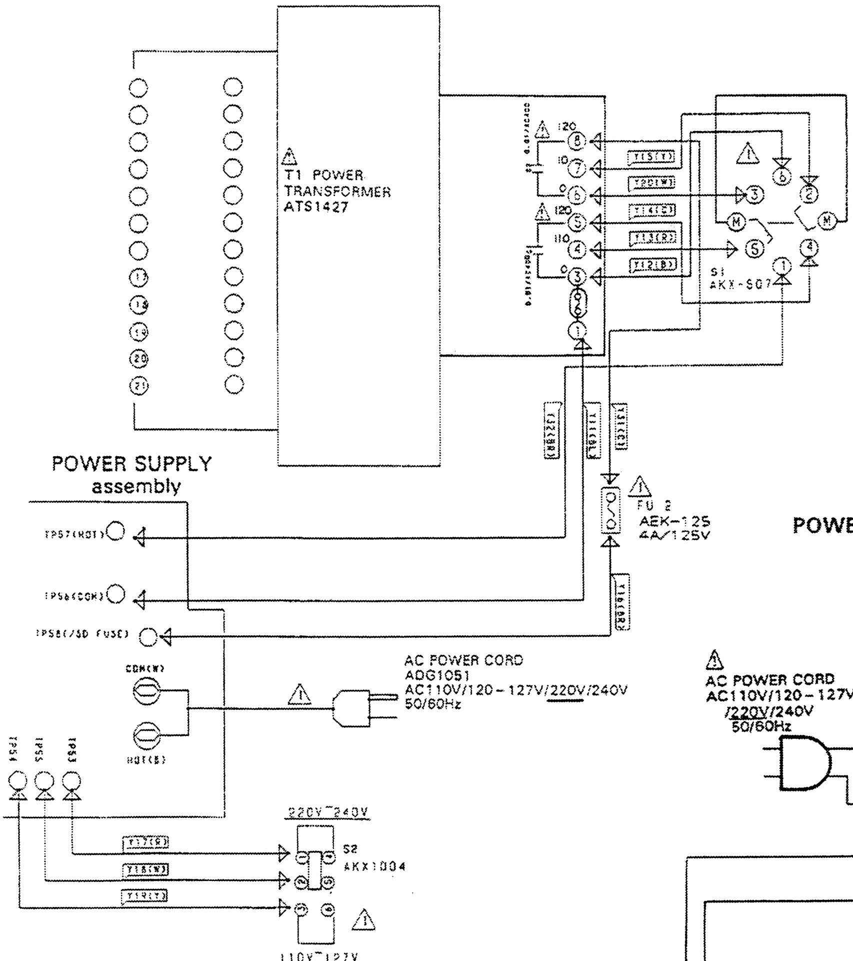
Mark	Symbol & Description	Part No.		Remarks
		AWK1721	AWK1612	
	Q607–Q610	XDC124ES	....	
	R636, R638	....	RD1/8PM103J	
	R643, R645, R646	RD1/8PM103J	....	
	R644	RD1/8PM222J	....	

9.2 PCB PARTS LIST

Mark	No. Description	Parts No.
	RY ASSEMBLY (FOR KC TYPE)	
	SEMICONDUCTORS	
	D2001	HSS104−02
	RELAIES	
	RY2001, RY2002	ASR1027
	RESISTORS	
	R2001	RS2LMF331J

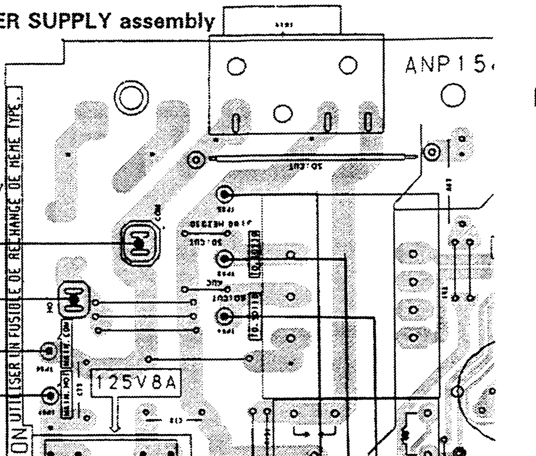
9.3 POWER SUPPLY SECTION (FOR VSX−D702S/SD)

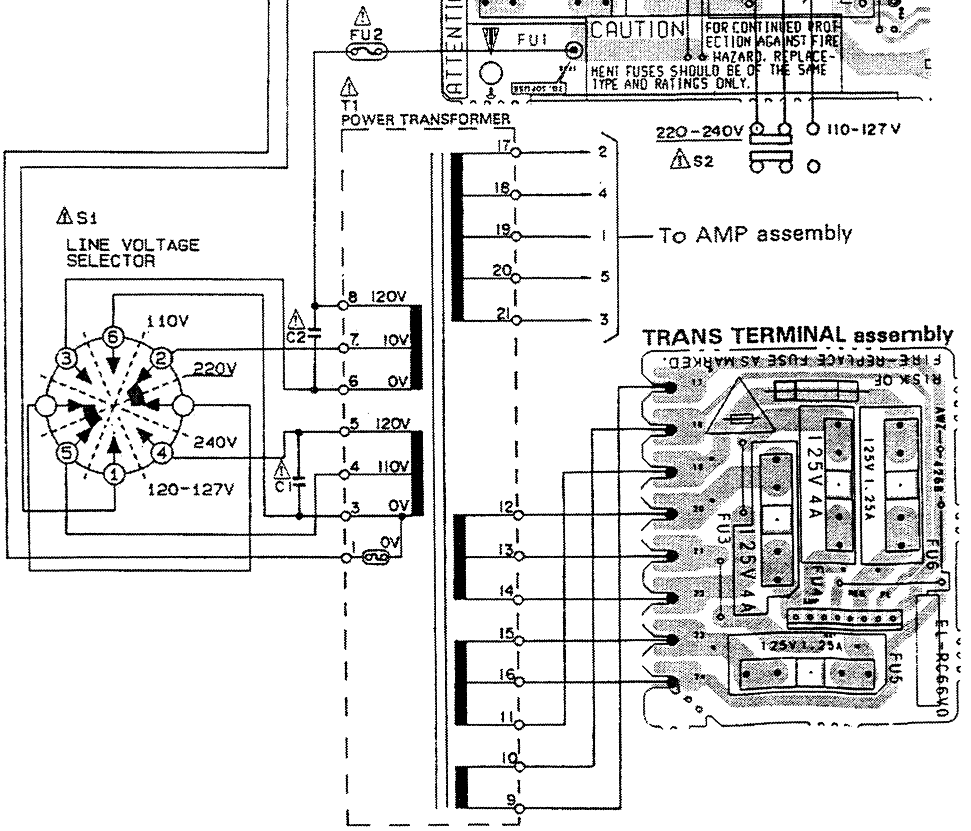
● Schematic Diagram


T1 POWER TRANSFORMER ATS1427
S1 AKX-S07
POWER SUPPLY assembly
TP57(HOT)
TP56(COM)
TP58(/SD FUSE)
FU 2 AEK-125 4A/125V
AC POWER CORD ADG1051 AC110V/120−127V/220V/240V 50/60Hz
COM(W)
HOT(B)
TP54 TP55 TP53
220V~240V
S2 AKX1004
110V~127V
120 110 0 120 10 0

● PCB Diagram

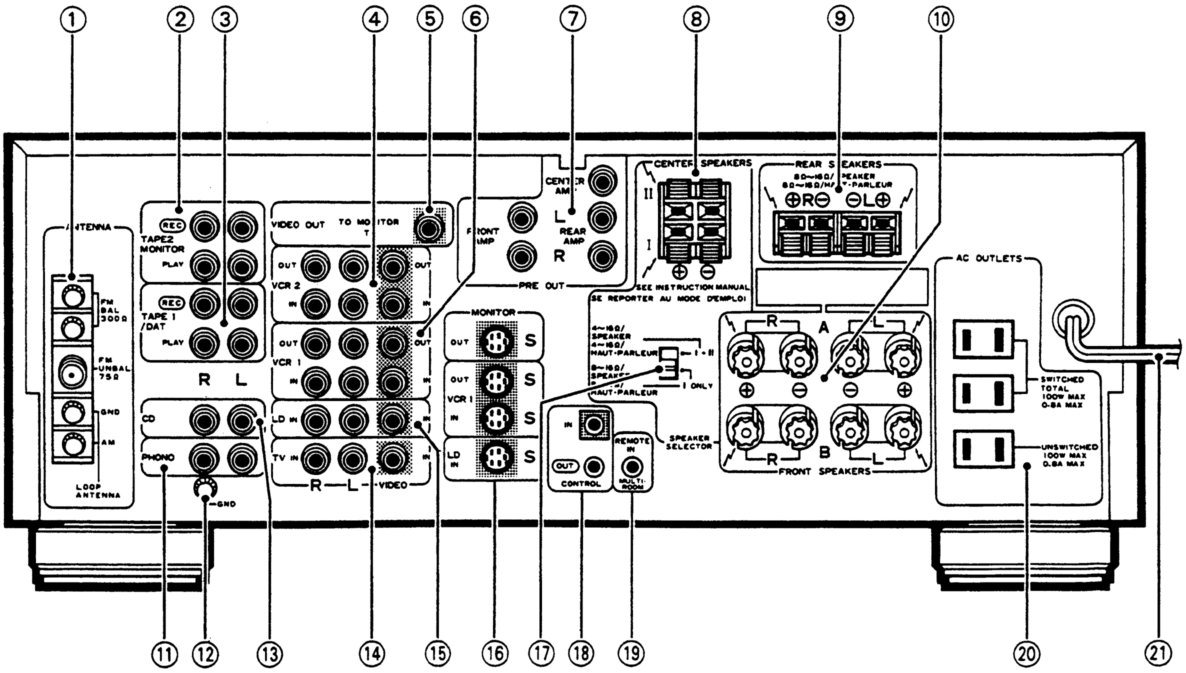
This PCB diagram is viewed from the parts mounted side.


POWER SUPPLY assembly
ANP15
AC POWER CORD AC110V/120−127V /220V/240V 50/60Hz
ATTENTION UTILISER UN FUSIBLE DE RECHANGE DE MEME TYPE.
125V8A


FU2
FU1
CAUTION FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACEMENT FUSES SHOULD BE OF THE SAME TYPE AND RATINGS ONLY.
220−240V
110−127V
S2
T1 POWER TRANSFORMER
17 18 19 20 21
2 4 1 5 3
To AMP assembly
S1 LINE VOLTAGE SELECTOR
110V
220V
240V
120−127V
C2
C1
8 120V
7 10V
6 0V
5 120V
4 110V
3 0V
1 0V
12 13 14 15 16 11 10 9
TRANS TERMINAL assembly
FIRE-REPLACE FUSE AS MARKED.
RISK OF
125V 4A
125V 1.25A
FU3
FU4
FU6
FU5
EL-RC66A0

10. PANEL FACILITIES

* Illustration shows VSX-D702S U.S. and Canadian models.


①
②
③
④
⑤
⑥
⑦
⑧
⑨
⑩
ANTENNA
FM BAL 300Ω
FM UNBAL 75Ω
GND
AM
LOOP ANTENNA
REC
TAPE2 MONITOR
PLAY
REC
TAPE 1 /DAT
PLAY
R L
CD
PHONO
GND
VIDEO OUT TO MONITOR TV
OUT
VCR 2
IN
OUT
VCR 1
IN
LD IN
TV IN
R L VIDEO
FRONT AMP
CENTER AMP
L
REAR AMP
R
PRE OUT
MONITOR
OUT S
OUT S
VCR 1
IN S
LD IN S
IN
OUT
CONTROL
REMOTE IN
MULTI-ROOM
CENTER SPEAKERS
II
I
⊕ ⊖
SEE INSTRUCTION MANUAL
SE REPORTER AU MODE D'EMPLOI
4~16Ω/SPEAKER
4~16Ω/HAUT-PARLEUR
I + II
8~16Ω/SPEAKER
8~16Ω/HAUT-PARLEUR
I ONLY
SPEAKER SELECTOR
REAR SPEAKERS
8Ω~16Ω/SPEAKER
8Ω~16Ω/HAUT-PARLEUR
⊕R⊖ ⊖L⊕
R A L
⊕ ⊖ ⊖ ⊕
R B L
FRONT SPEAKERS
AC OUTLETS
SWITCHED TOTAL 100W MAX 0.8A MAX
UNSWITCHED 100W MAX 0.8A MAX
⑪
⑫
⑬
⑭
⑮
⑯
⑰
⑱
⑲
⑳
㉑

① FM/AM ANTENNA terminals

Use these antenna terminals for reception of normal FM and AM broadcasts.

② TAPE 2 MONITOR jacks

Connect the second cassette deck to these jacks.

Connecting for Recording

The tape recording jack (REC) on the cassette deck should be connected to the REC side of the TAPE 2 MONITOR jack on the receiver with a pin plug connecting cord.

Connecting for Playback

Connect the TAPE PLAY jack on the cassette deck to the PLAY side of the TAPE 2 MONITOR jack on the receiver with a pin plug connecting cord.

③ TAPE 1/DAT jacks

Use these to connect the cassette deck or DAT (digital audio tape) deck.

Connecting for Recording

The tape recording jack (REC) on the cassette deck or DAT should be connected to the REC side of the TAPE 1/DAT jack on the receiver with a pin plug connecting cord.

Connecting for Playback

Connect the PLAY jack on the cassette deck or DAT to the PLAY side of the TAPE 1/DAT jack on the receiver with a pin plug connecting cord.

④ VCR 2 jacks

[VIDEO OUT]

When copying program material from the video component connected to the VCR 1, TV, VIDEO (front) or LD jacks, connect to the VIDEO INPUT jacks of the VCR used for recording.

[AUDIO OUT (L, R)]

When copying program materials from the video component connected to the VCR 1, TV, VIDEO (front) or LD jacks, or when recording music from an audio component source, connect to the AUDIO INPUT jacks of the VCR used for recording.

[VIDEO IN]

When monitoring the video image from a VCR used for copying, connect its VIDEO OUTPUT jacks here.

[AUDIO IN (L, R)]

When monitoring the audio channel from a VCR used for copying, connect its AUDIO OUTPUT jacks here.

⑤ VIDEO OUT (TV MONITOR) jack

Connect to monitor TV or to TV sets with video input terminals for watching program materials from a VCR 1, 2, TV, VIDEO (front) or LD player connected to this unit.

⑥ VCR 1 jacks

[VIDEO OUT]

When copying program material from the video component connected to the VCR 2, TV, VIDEO (front) or LD jacks, connect to the VIDEO INPUT jacks of the VCR used for recording.

[AUDIO OUT (L, R)]

When copying program material from the video component connected to the VCR 2, TV, VIDEO (front) or LD jacks, or when recording music from an audio component source, connect to the AUDIO INPUT jacks of the VCR used for recording.

[VIDEO IN]

When monitoring the video image from a VCR used for playing, connect its VIDEO OUTPUT jacks here.

[AUDIO IN (L, R)]

When monitoring the audio channel from a VCR used for playing, connect its AUDIO OUTPUT jacks here.

⑦ PRE OUT jacks

[FRONT AMP]
When a separate power amplifier is used to drive the front speakers, connect the power amplifier to these jacks.

[CENTER AMP]
When a separate power amplifier is used to drive the surround center speaker, connect the power amplifier to this jack.

[REAR AMP]
When a separate power amplifier is used to drive the rear speakers, connect the power amplifier to these jacks.

⑧ CENTER SPEAKER terminals

Connect the center speaker to these terminals.
The VSX-D702S has two sets of center speaker terminals so dual center speakers can be used.

NOTE:
Do not allow any of the cord's conductors to protrude from the terminals or touch any other conductors. Malfunctioning or breakdowns may occur when conductors come into contact with each other.

⑨ REAR SPEAKERS terminals

Connect the rear speakers to these terminals.

NOTE:
Do not allow any of the cord's conductors to protrude from the terminals or touch any other conductors. Malfunctioning or breakdowns may occur when conductors come into contact with each other.
Use rear speakers of impedance 8 Ω — 16 Ω.

⑩ FRONT SPEAKERS terminals

A: Connect to the first set of speakers.
B: Connect to the second set of speakers.
Speaker lead wire preparation and connection.

NOTE:
Do not allow any of the cord's conductors to protrude from the terminals or touch any other conductors. Malfunctioning or breakdowns may occur when conductors come into contact with each other.
Use speakers of impedance 8 Ω — 16 Ω.

⑪ PHONO input jacks

Connect to the output cables from a turntable.

⑫ GND terminal

Connect the turntable ground lead to this terminal.

⑬ CD input jacks

Connect to the output jacks of a compact disc player.

⑭ TV jacks (input)

Use these jacks if you wish to connect a TV tuner with both video and audio outputs.

[VIDEO IN]
Connect the TV tuner's VIDEO OUTPUT to this jack.

[AUDIO IN (L, R)]
Connect the TV tuner's AUDIO OUTPUT to these jacks.

⑮ LD jacks

[VIDEO IN]
When watching the video image from an LD player, connect its VIDEO OUTPUT jacks here.

[AUDIO IN (L, R)]
When playing back the audio channel from an LD player, connect its AUDIO OUTPUT jacks here.

⑯ S (connector) video jacks (VSX-D702S only)

When used in conjunction with a VCR, Video disc player (LaserDisc player), or TV monitor equipped with S video jacks, connect to these jacks.

⑰ CENTER SPEAKER SELECTOR Switch

This switch changes the speaker impedance for when only one center speaker is connected, or two speakers are connected.

When only one speaker is connected:
Be sure to set the switch to "I ONLY" (down side), and always connect a speaker with an impedance of 8 Ω — 16 Ω to the I terminal.

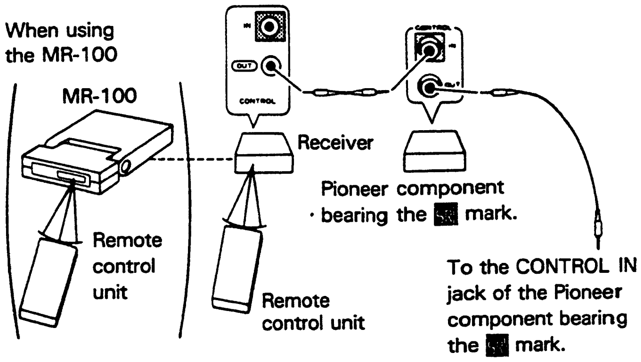
When two speakers are connected:
Be sure to set the switch to "I + II" (up side), and always use speakers with an impedance of 4 Ω — 16 Ω.

NOTE:
Switch the CENTER SPEAKER SELECTOR when the unit power supply is at STANDBY. Do not switch the selector when the power supply is at ON.

⑱ CONTROL IN/OUT jacks

IN: Connect this jack to other Pioneer components (main unit or remote control unit) when using those components to control this unit.
OUT: Connect this jack to other Pioneer components when using the remote control of this unit to control the other components.

NOTE:
The receiver's remote sensor does not function when a plug is inserted in IN jack. To operate, point the remote control unit at the remote sensor on the component to which the receiver's IN jack is connected.


When using the MR-100
MR-100
IN
OUT
CONTROL
Receiver
Pioneer component bearing the ■ mark.
Remote control unit
Remote control unit
To the CONTROL IN jack of the Pioneer component bearing the ■ mark.

⑲ MULTI-ROOM REMOTE IN jack

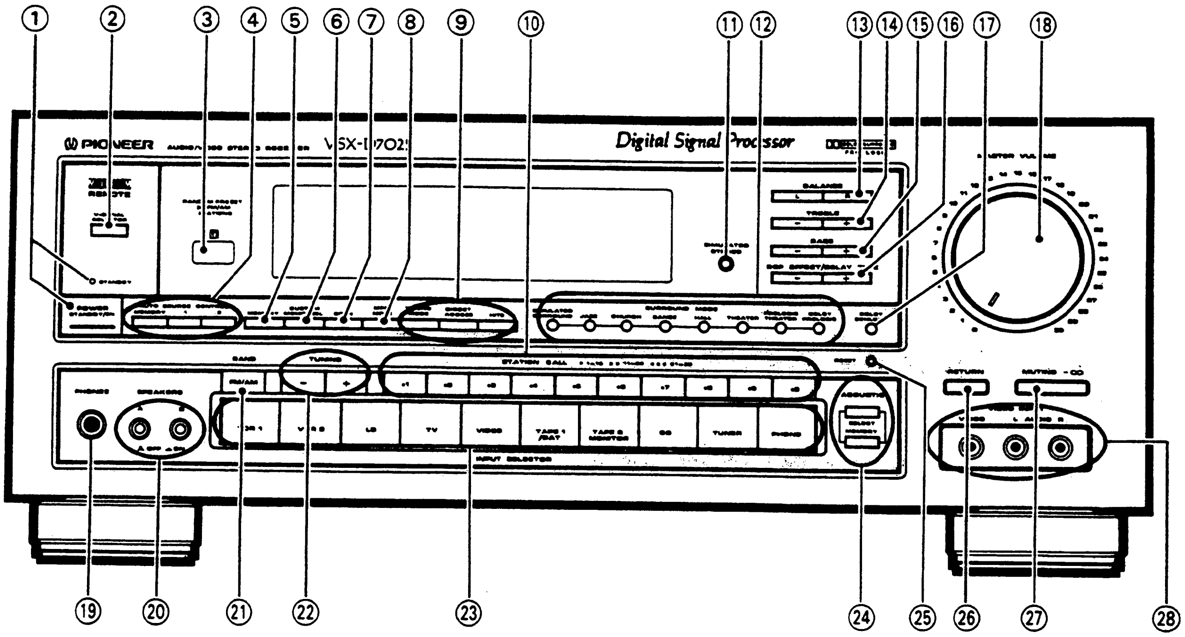
Connect to the separately sold MR-100 Multi-Room remote control unit.

⑳ AC OUTLETS
[U.S. and Canadian models]

CAUTION:
DO NOT CONNECT MONITOR OR TV SET.

㉑ Power cord

* Illustration shows model VSX-D702S.



① POWER STANDBY/ON switch/STANDBY indicator

This is the switch for electric power.

ON: When set to the ON position, power is supplied and the unit becomes operational.

STANDBY: When set to STANDBY position, the main power flow is cut and the unit is no longer fully operational. A minute flow of power feeds the unit to maintain operation readiness.
The STANDBY indicator lights when the power is STANDBY, and goes out during ON.

[Timer ON/OFF possible]

When the unit is switched ON, ON/OFF control can be performed by means of the optional timer.

NOTE:

When the power is initially turned ON, muting will be applied to prevent sound from being output for about 5 seconds.

② V-SIGNAL (VIDEO SIGNAL) SELECTOR button

Use to change the video signal in sequence leaving the sound unchanged.

→VCR 1 → VCR 2 → LD → TV → VIDEO → OFF

The current setting is shown by an indicator on the display section.

③ Remote sensor

④ AUTO SOURCE CONTROL/MEMORY buttons

1, 2 buttons:

These buttons are for memorizing and recalling your current settings. Both 1 and 2 can be used to memorize settings. If you connect another component, such as a CD player, to the CONTROL OUT jack on the rear panel, the signals to switch power on and start play are also transmitted.

MEMORY:

Use when memorizing settings to a 1, 2 button.

⑤ MEMORY button

Pressing this button will result in the memorization of the current broadcast band, reception frequency, and MPX AUTO/MONO mode. This button is also used for custom memory operation.

⑥ CUSTOM MEMO SEL button

Recall a genre name with this button.

⑦ SCAN button

Operate when the INPUT SELECTOR is set to TUNER. Station frequencies assigned to the STATION CALL buttons are tuned in, one after another, beginning with the current station no., for approximately 5 seconds each. The display section SCAN indicator will light. Press the button again and the tuner remains tuned in to the station playing when the button was pressed the second time.
Station frequencies not assigned to station numbers in the memory are skipped.
When you have selected a CUSTOM MEMORY genre, memory scan is performed on the stations in that genre.

⑧ MPX MODE button

Use to select the auto stereo mode or monaural mode when listening to FM broadcasts. The monaural mode has been selected when the FM MONO indicator in the display section is lit.

Auto stereo mode:
Normally, leave in this mode for reception. When a stereo FM broadcast is received, it will be automatically reproduced in stereo.

Monaural mode:
When receiving distant stations or stations with weak broadcast signals, the input signal may be weak, thus resulting in increased noise during FM stereo broadcasts. In this event, setting the receiver to the monaural mode will reduce the noise. In this case, however, FM stereo broadcasts will be reproduced in monaural sound.

NOTE:
This button has no effect on reception of AM broadcasts.

⑨ Tuning buttons

TUNING MODE tuning selector button:

Use to select the tuning mode. To select the AUTO tuning mode, press this button to light the AUTO TUNING indicator in the display section. To select the MANUAL tuning mode, switch off the AUTO TUNING indicator.

AUTO tuning
When the − or + TUNING button is pressed, the receiver automatically scans the broadcast station frequencies. When a broadcast is detected, the scanning stops at that frequency.

NOTE:
Pressing the TUNING button (− or +) while scanning is taking place causes scanning to stop.

MANUAL tuning
This lets you manually tune to particular broadcast frequencies. Each press of the + or − button raises or lowers the frequency by one tuning step. For continuous scanning, keep the button pressed, then release it to stop scanning.

DIRECT ACCESS tuning button:

When this button is pressed, the STATION CALL buttons function as ten-key number buttons for direct input of the desired reception frequency. Press again to cancel this mode.
If the input station falls outside of the receiver's tuning range, the display section will display a message: "UPPER" if the frequency is too high and "LOWER" if it is too low.

HITS (Hyper Intelligent Tuning System) button:

Press this button, and search automatically begins up and down the frequency for stations that can be received. When a station that can be received is found, the search operation stops.

⑩ STATION CALL buttons

Up to 30 FM or AM stations can be preset at random.
These buttons are used to preset and recali desired broadcasting stations, FM AUTO/MONO mode.

NOTE:
Pressing a STATION CALL button will select TUNER as the source, regardless of what other listening source or function was selected. They are also used when performing direct access tuning.

⑪ SIMULATED STEREO button

Press to produce a simulated stereo effect when listening to monaural sources (for example, normal AM or TV broadcasts).
"SIMULATED STEREO" appears on the display section.

NOTE:
- *This effect is not produced through the rear speakers.*
- *Use with the SURROUND MODE in the OFF.*

⑫ SURROUND MODE selector buttons

⑬ BALANCE buttons

Use them to adjust the sound volume balance between left and right speakers.
L: Press to decrease the sound on the right side.
R: Press to decrease the sound on the left side.
Press L and R together to bring the volume balance back to center.

NOTE:
The left-right sound volume balance cannot be adjusted on the rear speakers.

⑭ TREBLE control buttons

Use to adjust the high-frequency level. Press the + button to increase the high-frequency level, and the − button to decrease it.
The TONE indicator appears on the display section.
When both buttons (−, +) of the TREBLE control are pressed simultaneously, the treble response will be set to the flat (normal) condition.

⑮ BASS control buttons

Use to adjust the low-frequency level. Press the + button to increase the low-frequency level, and the − button to decrease it.
The TONE indicator appears on the display section.
When both buttons (−, +) of the BASS control are pressed simultaneously, the bass response will be set to the flat (normal) condition.

⑯ DSP EFFECT/DELAY TIME buttons

[DSP EFFECT]
When using a surround mode other than DOLBY PRO LOGIC SURROUND, 10-step adjustment of the effect level is possible from 10 to 100.

[DELAY TIME]
Operates when the DOLBY PRO LOGIC SURROUND mode is ON.
Switches to surround delay time in 8 steps. For DOLBY PRO LOGIC SURROUND, 20 ms is standard.
Changes in 2 ms steps.

16 ms ↔ 18 ms ↔ ··· ↔ 28 ms ↔ 30 ms

⑰ DOLBY 3CH LOGIC button

Select this setting when stereo-source regeneration and rear speakers are not connected and you wish to use the front L, front R, and center speakers to enjoy audio/visual material bearing the DD DOLBY SURROUND mark.

⑱ MASTER VOLUME control

Use it to simultaneously adjust the sound volume from the front, center and rear speakers.

⑲ PHONES jack

Connect the plug on your headphones to this jack. Set all SPEAKERS A and B switches to OFF if you want to cut the sound from speakers and listen to it only through the headphones.

⑳ SPEAKERS buttons (A, B) ■ OFF ▂ ON

ON/OFF switches for the A and B speaker systems.

NOTE:

No sound will be heard thorough the speakers when both A and B buttons are depressed if only one set of speakers has been connected to either A or B SPEAKERS terminals.

㉑ BAND (FM/AM) button

Use this to switch between FM and AM frequency band reception.

㉒ TUNING buttons

+ : Performs tuning from the currently displayed station frequency in ascending frequency order.

– : Performs tuning in order of descending frequencies.

㉓ INPUT SELECTOR buttons

VCR 1:	Press when performing playback on a first VCR unit.
VCR 2:	Press when performing playback on a second VCR unit.
LD:	Press when performing playback on an LD player.
TV:	Press when using a TV tuner connected to the TV jacks.
VIDEO:	Press when performing playback on a VCR connected to VIDEO INPUT jacks on the front panel.
TAPE 1/DAT:	Press when performing playback on a DAT or cassette deck.
TAPE 2 MONITOR:	Press when performing playback on a second cassette deck or second DAT and when monitoring recording.
CD:	Press when playing compact discs on a CD player.
TUNER:	Press when listening to radio broadcasts.
PHONO:	Press when playing records on turntable.

㉔ ACOUSTIC buttons

MEMORY:

Pressing this button will result in the memorization of the sound quality (tone control condition). Press again to cancel this mode.

SELECT:

- This button is used to preset the five acoustic memories (A–E).
- This button is also used to recall previously set sound quality settings. Each time you press the button, the sound quality setting advances in the order shown below.

→ FLAT → LOUDNESS → A → B → C → D → E →

FLAT:	For flat (normal) frequency response.
LOUDNESS:	Emphasizes the low- and high- frequency ranges. Produces a fuller sense of sound, particularly when listening at low volume.
A–E:	Memorized acoustic memory settings.

㉕ RESET button

Use this when normal operation becomes impossible because of external influences such as static electricity or lightning, or when operation is impossible even when operation buttons are pressed. Press this button to return to normal operating conditions.

If you press this button when the power is ON, the unit switches to POWER STANDBY, and the entire contents of the memory are erased.

㉖ RETURN button

Press this button to return the receiver into the initial state. TUNER is selected at this initial state. Adjust the sound level by using the MASTER VOLUME control.

- TAPE 2 MONITOR .... OFF
- SURROUND MODE....... OFF
- MUTING .... OFF
- BALANCE .... CENTER
- FUNCTION.............. TUNER
- V-SIGNAL SELECTOR.... OFF
- TONE .... flat

The HITS function searches for broadcast stations among the frequencies displayed.

NOTE:

If no sound is output after the RETURN button is pressed, make sure that SPEAKERS buttons are turned on.

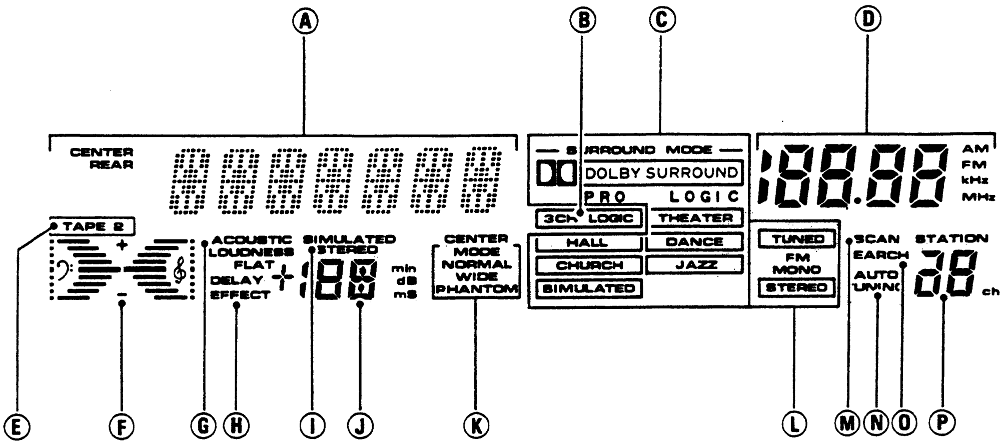
㉗ MUTING button

Press to temporarily cut off the sound volume. When pressed again, the sound will return to its previous level.

㉘ VIDEO INPUT jacks

VIDEO components such as a VCR or TV camera, etc. can be connected.

DISPLAY SECTION


Ⓐ
Ⓑ
Ⓒ
Ⓓ
CENTER
REAR
TAPE 2
ACOUSTIC
LOUDNESS
FLAT
DELAY
EFFECT
SIMULATED
STEREO
min
dB
mS
CENTER
MODE
NORMAL
WIDE
PHANTOM
SURROUND MODE
DOLBY SURROUND
PRO LOGIC
3CH LOGIC
THEATER
HALL
DANCE
CHURCH
JAZZ
SIMULATED
AM
FM
kHz
MHz
TUNED
FM
MONO
STEREO
SCAN
SEARCH
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Ⓐ CHARACTER/LEVEL/BALANCE display

- This displays the name of the component selected with the INPUT SELECTOR and V-SIGNAL SELECTOR, etc.
- It also displays the level and balance settings during adjustment.

Ⓑ DOLBY 3CH LOGIC indicator

Ⓒ SURROUND MODE indicators

Ⓓ Frequency/Band display

Ⓔ TAPE 2 indicator

Lights up when the INPUT SELECTOR is set to TAPE 2 MONITOR ON.

Ⓕ TONE level indicator

Shows the settings of the BASS and TREBLE buttons.

Ⓖ ACOUSTIC display

Ⓗ DELAY/EFFECT indicator

Ⓘ SIMULATED STEREO indicator

Ⓙ ACOUSTIC/DELAY TIME/EFFECT LEVEL/LEVEL/ SLEEP TIME display

- Indicates delay time (ms) when using DOLBY PRO LOGIC SURROUND.
- Indicates rear level and center level (dB).
- Indicates sleep timer settings (min).
- Displays Acoustic memory letters A to E.
- Displays surround effect level from 10 to 100.

Ⓚ CENTER MODE indicators

These display the center mode (NORMAL, WIDE, PHANTOM) during DOLBY PRO LOGIC SURROUND and DOLBY 3CH LOGIC operation

Ⓛ Tuning indicators

TUNED:	Lights up when a station is tuned.
FM MONO:	Lights up when the FM MONO mode is selected with the MPX MODE button.
STEREO:	Lights up when a stereo FM broadcast is being received.

Ⓜ SCAN indicator

Lights up during memory scan operation.

Ⓝ AUTO TUNING indicator

Lights up when in the auto tuning mode.

Ⓞ SEARCH indicator

Ⓟ STATION display

Indicates the channel (ch) selected with the STATION CALL buttons.

11. SPECIFICATIONS

Amplifier section

Continuous average power output of 110 watts* per channel, min., at 8 ohms, from 20 Hz to 20,000 Hz with no more than 0.05 % total harmonic distortion (front).**

Continuous power output	
(Rear only driven)	40 W + 40 W (1 kHz, 0.8 %, 8 Ω)
(Front and center driven)	
Front	70 W + 70 W (1 kHz, 0.8 %, 8 Ω)
Center	70 W (1 kHz, 0.8 %, 8 Ω)
Dynamic Power (2 Ω/4 Ω)	240 W/220 W
Input (Sensitivity/Impedance)	
PHONO MM	2.5 mV/47 kΩ
CD, TAPE 1/DAT, TAPE 2, LD, VCR 1, VCR 2	150 mV/47 kΩ
Phono Overload Level (T.H.D. 0.1 %, 1 kHz)	
PHONO MM	120 mV
Frequency Response	
PHONO MM	20 Hz to 20,000 Hz ±0.3 dB
CD, TAPE 1/DAT, TAPE 2, LD, VCR 1, VCR 2	5 Hz to 100,000 Hz $^{+0}_{-3}$ dB
Output (Level/Impedance)	
TAPE 1/DAT REC, TAPE 2 REC	150 mV/2.2 kΩ
VCR 1 OUT, VCR 2 OUT	150 mV/2.2 kΩ
Tone Control	
BASS	±8 dB (100 Hz)
TREBLE	±8 dB (10 kHz)
Muting	−∞ dB
Loudness Contour	6 dB (100 Hz) 3 dB (10 kHz)
Signal-to-Noise Ratio (IHF, short circuited, A network)	
PHONO MM	76 dB
CD, TAPE 1/DAT, TAPE 2, LD, VCR 1, VCR 2	97 dB
Signal-to-Noise Ratio [EIA, at 1 W (1 kHz)]	
PHONO MM	77 dB
CD, TAPE 1/DAT, TAPE 2, LD, VCR 1, VCR 2	80 dB

* *Measured pursuant to the Federal Trade Commission's Trade Regulation rule on Power Output Claims for Amplifier.*
** *Measured by Audio Spectrum Analyzer.*

VIDEO Section

Input (Sensitivity/Impedance)	
VCR 1, VCR 2, LD	1 Vp-p/75 Ω
Output (Level/Impedance)	
VCR 1, VCR 2, MONITOR	1 Vp-p/75 Ω
Frequency Response	
VCR 1, VCR 2, LD → MONITOR	5 Hz — 7 MHz $^{+0}_{-3}$ dB
Signal to Noise Ratio	55 dB
Cross Talk	55 dB

MAINTENANCE OF EXTERNAL SURFACES

- Use a polishing cloth or dry cloth to wipe off dust and dirt.
- When the surfaces are very dirty, wipe with a soft cloth dipped in some neutral cleanser diluted five or six times with water, and wrung out well, and then wipe again with a dry cloth. Do not use furniture wax or cleaners.
- Never use thinners, benzene, insecticide sprays and other chemicals on or near this unit, since these will corrode the surfaces.

FM Tuner Section

Frequency Range	87.5 MHz to 108 MHz
Usable Sensitivity	Mono: 10.8 dBf, IHF (0.95 μV/75 Ω)
50 dB Quieting Sensitivity	Mono: 15.3 dBf, (1.6 μV/75 Ω) Stereo: 37.0 dBf, (19.5 μV/75 Ω)
Signal-to-Noise Ratio	Mono: 80 dB (at 65 dBf) Stereo: 76 dB (at 85 dBf)
Distortion	Mono: 0.2 % (1 kHz) Stereo: 0.3 % (1 kHz)
Capture Ratio	1 dB
Alternate Channel Selectivity	65 dB (400 kHz)
Stereo Separation	45 dB (1 kHz)
Frequency Response	30 Hz to 15 kHz $(^{+0.5}_{-2.0})$ dB
Antenna Input	300 Ω balanced 75 Ω unbalanced

AM Tuner Section

Frequency range	
With 9 kHz step	531 kHz — 1,602 kHz
With 10 kHz step	530 kHz — 1,700 kHz
Sensitivity (IHF, Loop antenna)	300 μV/m
Selectivity	25 dB
Signal-to-Noise Ratio	50 dB
Antenna	Loop antenna

Miscellaneous

Power requirements	
U.S. and Canadian models	AC 120 V, 60 Hz
Multi-voltage model	AC 110 V/120 — 127 V/220 V/240 V (Switchable), 50/60 Hz
Power consumption	
U.S. and Canadian models	260 W, 340 VA
Multi-voltage model	660 W
AC Outlets	
U.S. and Canadian models	
SWITCHED x 2	TOTAL 100 W (0.8 A) MAX
UNSWITCHED x 1	100 W (0.8 A) MAX
Multi-voltage model	
SWITCHED x 2	TOTAL 100 W MAX
UNSWITCHED x 1	100 W MAX
Dimensions	420 (W) x 162 (H) x 406 (D) mm 16-9/16 (W) x 6-3/8 (H) x 16 (D) in
Weight (without package)	10.2 kg (22 lb 8 oz)

Furnished Parts

FM T-type antenna	1
AM Loop antenna	1
Dry cell batteries (size "AA" (IEC LR6/AM-3) Alkaline)	2
Remote control unit	1
Operating Instructions	1

NOTE:
Specifications and the design are subject to possible modifications without notice due to improvements.